

CATALOGUS PLANTARUM

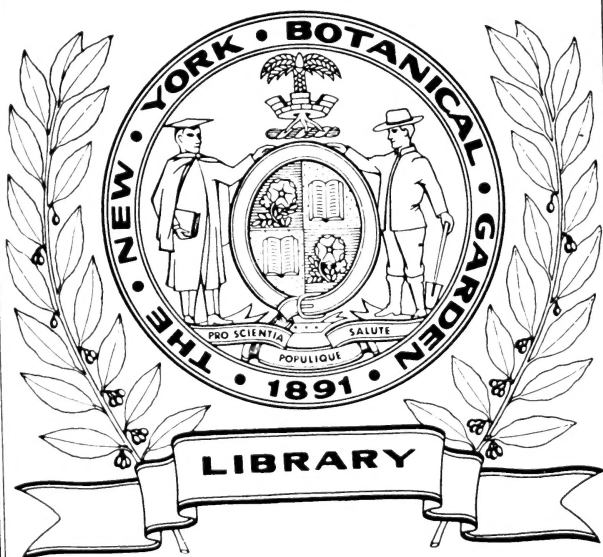
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CATALOGUE

OF

PLANTS GROWING WITHOUT CULTIVATION

IN THE

STATE, OF NEW JERSEY,

WITH

A SPECIFIC DESCRIPTION OF ALL THE SPECIES OF VIOLET FOUND THEREIN.

DIRECTIONS

FOR COLLECTING, DRYING, LABELING AND PRESERVING BOTANICAL  
SPECIMENS, AND A DESCRIPTION OF SUITABLE APPARATUS  
THEREFOR.

WITH

SUGGESTIONS TO TEACHERS PROSECUTING THE STUDY OF BOTANY.

TO WHICH IS ADDED,

A DIRECTORY

OF LIVING BOTANISTS OF NORTH AMERICA AND THE WEST INDIES.

BY

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NEW YORK:

J. W. Schermerhorn & Co.,

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1874.

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# ABBREVIATIONS.

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M.	-	-	-	-	-	-	Monmouth County.
Mer.	-	-	-	-	-	-	Mercer County.
Mid.	-	-	-	-	-	-	Middlesex County.
Bur.	-	-	-	-	-	-	Burlington County.
O.	-	-	-	-	-	-	Ocean County.
W.	-	-	-	-	-	-	Warren County.
Mor.	-	-	-	-	-	-	Morris County.
Hun.	-	-	-	-	-	-	Hunterdon County.
Hud.	-	-	-	-	-	-	Hudson County.
G.	-	-	-	-	-	-	Gloucester County.



## PREFACE.

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THE following Catalogue was undertaken because I believed that a record of the names, and a description of the localities of the plants growing without cultivation in the State of New Jersey, would be a useful book to students of Botany, as well as to Botanists and collectors of Plants all over the country.

Having collected largely, and examined with great care, the Flora of the State, I began to prepare materials for a catalogue, and communicated my design to the late Dr. Torrey, who encouraged me to go forward, giving me a list of plants which he knew to be indigenous, and furnishing me with other important information.

The late Dr. P. D. Knieskern made a careful examination of the eastern parts of the counties of Monmouth, Ocean, and Burlington; and furnished me with many of the interesting plants found in the pine regions. He made a specialty of the Cyperaceæ and Gramineæ, and many of the members of these orders are introduced on his authority.

I am also indebted to Prof. Geo. H. Cook, Vice President of Rutgers College, Wm. M. Canby, of Wilmington, Delaware, and Prof. Porter, of Lafayette College.

Prof. Samuel Lockwood, of Freehold, furnished me with plants growing on the shores of New York Bay in the vicinity of Key-port.

I am under special obligations to Rev. Dr. Knighton, of the Brainerd Institute, for much information regarding the Flora of the Northwestern parts of the State, and for other valuable assistance.

The localities of rare and curious plants have been carefully noted, and, for the convenience of inexperienced Botanists and collectors, general localities have been described, such as: *dry soils—damp, shady woods—hill-sides—open woods—meadows—wet grounds—swamps*, etc.

The Botanical Directory is a part of the one published by the Torrey Botanical Club, and includes the address of most of the living Botanists in North America and the West Indies.

In order to make the work more valuable to the collector, and especially to the beginner, I have introduced an article on the collecting, pressing, and preserving of Botanical specimens, with a description of suitable apparatus, and suggestions to teachers pursuing the study of Botany.

This Catalogue will fall into the hands of men who can form a just estimate of the difficulties and labor incident to the preparation of a work like this ; consequently, I expect it to be judged with lenity and criticised with charity.

I shall be very thankful to have defects and omissions pointed out, that in a possible future edition the Catalogue may be perfected.

WHITE PLAINS,

*April*, 1874.

## FLORA OF NEW JERSEY.

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THE State of New Jersey extends nearly two hundred miles from north to south, possessing a very varied surface, and a no less diversified geological formation. The land rises in the north and west, in mountain heights of three thousand feet, grading towards the south and east to low plains just a few feet above the sea level, and is the beginning of the territory along the eastern side of the Appalachian system, known as the Atlantic slope ; where it first assumes the marked characteristic of low plains on the coast, succeeded inland by a hilly country, which grades upwards into mountains.

This difference of elevation from the south towards the north gives a wide range of temperature, so that while in the northern boundaries of the State plants are found common to New England, the southern and coast regions yield the vegetation of Eastern Virginia.

The whole western border is washed by the Delaware River, fed by tributaries from Pennsylvania and New York, bringing to its banks the seeds of a vast territory north and west of it.

Its eastern shores are washed by the Hudson River and the Atlantic Ocean, wafting the seeds of many lands to the alluvial plains which skirt its eastern boundaries. Its varied soil is another remarkable feature of this State ; limestone in the north accompanied by iron and peat ; marl, alluvial, arenaceous, and clay deposits, with red shales and heavy loam, impregnated with iron, in the middle ; while in the south and east loose sands, peat and sphagnous bogs, and green sand deposits alternate with patches of loam, in which clay more or less predominates.

The wonderful variety of soil, the differences of elevation, and the wide range of temperature, combine to give rise to one of the most varied and remarkable Floras of the Western Continent.

The cedar swamps with which the pine regions are besprinkled, are the homes of some of the most beautiful and remarkable individuals of the flora of the temperate zones. There the *Pogonia*, the *Habenaria*, the *Orchis*, the *Arethusa*, the *Calopogon*, and the *Sarracenia* flourish ; while the forests of the north and the middle, are adorned with the *Liriodendron*, the *Magnolia*, the *Ilex*, the *Kalmia* and the *Rhododendron*.



DIRECTIONS  
FOR  
DRYING AND PRESERVING PLANTS.

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IT is a matter of very great importance to the Botanist to possess a good Herbarium. Nearly every student in Botany makes an attempt to form one, but it is frequently done in so slovenly a manner that the collection is worthless.

APPARATUS FOR DRYING PLANTS.

Let a quantity of old newspapers, or what is still better, coarse white wrapping-paper,\* be procured and cut into pieces sixteen inches long and eleven and a half inches wide; then place them together in piles of eight in thickness, and stitch the corners, so as to keep them in their places. Having prepared seventy-five or a hundred such pads, which I shall call *driers*, get two pieces of pine boards of the same size as your driers, then provide yourself with a hundred or more sheets of newspaper† folded once, so as to allow a plant to be placed between the folds. Let these sheets be cut to correspond with your driers. You will then be supplied with the simplest apparatus for drying plants.

TO THE COLLECTOR.

Provide yourself with a tin box seventeen inches long, and a florist's trowel (a strong butcher's knife will do very well). In collecting plants, if they are small and herbaceous, procure the whole plant, including the root; handle it carefully, and if the root is dirty wash it by shaking it gently in water, and afterwards fling as much of the water off as you can without injuring the plant, then place it carefully in your box. If possible, procure ten or a dozen good specimens of the same plant. The best time for collecting is clear weather; and plants are in a proper state for collection when they are in full flower. Sometimes small

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\* The publishers of the "American Naturalist," Messrs. Putnam & Co., Salem, Mass., advertise an excellent paper for driers, and also suitable paper for mounting plants.

† White paper, such as printers use, is better, and for very delicate plants is necessary.

## X DIRECTIONS FOR DRYING AND PRESERVING PLANTS.

plants may be procured, having both flowers and fruit at the same time. If possible, they should be procured in that state. If this cannot be done, specimens with flowers should be procured, and afterwards, those with fruit. On some plants the flowers appear before the leaves, as is the case with many trees, in such cases the leaf must be procured afterwards but should be taken from the same plant.

### PRESSING.

After having collected some specimens, lay one of your boards on the floor or on a table, and place three driers upon it; then upon the top of the driers lay a sheet of paper which you have prepared for the purpose, and open it, letting one half of the sheet lie over upon the table; then lay a plant upon that which rests upon the driers, and after having arranged the leaves, flowers, root, and *fruit*, if it has any, so as to present a natural appearance, turn the half sheet over it, and lay upon it three more driers, and so on, till you have arranged as many as you wish; then lay the other board upon the top of the whole, and place upon the board a weight. A large stone may be used for this purpose, or several may be used. Some plants need heavier weights than others. The weight should be just sufficient to keep the leaves extended smoothly; if too much is used, it crushes the parts and causes them to turn black. Some plants will turn black in defiance of the most careful management. Most herbaceous plants change their color to some extent, yet, with care, they will retain much of their natural appearance.

Having left the plants in press for ten or twelve hours, the top board should be taken off and laid upon the table beside the pile, three fresh driers laid upon it, and the damp ones should then be removed from the top of the uppermost plant, and the plant be laid carefully upon the top of the three fresh driers without removing it from between the folds of the paper in which it was placed; then three fresh driers laid upon the top of the plant, and so on till all have been removed, when the board that was at the bottom may be laid upon the top, and the weight replaced; the damp driers should then be placed on a line to dry. This process of changing should be carried on till the plants are in the condition of well-cured hay. They may then be removed from the press and placed between the folds of dry paper, cut to the size of the driers. When a plant is put into the press, a bit of paper should be laid in with it, on which should be written the *generic* and *specific* names of the plant; also the name of the place where it was collected, and the date; and if anything uncommon is noticed about it, this should be mentioned, as follows:

VIOLA,  
lanceolata;  
Freehold, Monmouth Co., N. J.,  
May 10th, 1856.  
Growing in a peat bog.  
Flowers unusually large.

## PRESSES.

1. The press already described, consisting of two pieces of boards of the size of the driers, with a stone or any convenient heavy body for a weight, is the most simple.

2. A press with a screw to apply force is in common use, and has its advantages on account of its completeness.

3. Two pieces of binder's boards, with muslin glued on them and the whole varnished with shellac varnish, and fastened together with straps, are sometimes used, and are convenient, because they are light and may be carried into the field.

4. Messrs. Barnes & Co., of New York City, keep for sale a complete apparatus for collecting and drying. Their press has sides of wire gauze, which possesses the advantage of allowing drying to go on more freely than any other press. Prof. Wood is the inventor of this press.

## SIZE OF PLANTS.

When a plant is too large to lay upon the paper, it may be bent, but in no case should it be cut. Of large plants, such as shrubs and trees, a branch may be obtained containing good specimens of leaves, flowers, and fruit, if possible. In collecting herbaceous plants, those of medium size should be obtained. The author has been in the habit of collecting, so far as practicable, all the forms of a plant, from the overgrown specimen to the dwarf.

## PRESERVING PLANTS.

Having dried and labeled a number of plants, white paper of a fair substance may be obtained and cut to the size of the driers; then the specimens may be fastened to the sheets in any of the following ways. They may be stitched on with cotton thread, or a little glue may be touched to the leaves, and parts of the stem, and thus fastened to the paper. A very neat way of doing it is to dissolve Gum Arabic to the consistency of cream, and put into a gill of the solution a lump of rock-candy as large as a hickory-nut. When the whole is perfectly dissolved, spread it with a camel's-hair brush over common writing paper (*having first laid the paper smoothly on a table*), and allow it to dry. Continue to put on coat after coat, until it presents a smooth, glossy surface; when dry, it is fit for use. After having placed the plant as it is to lie on the paper, cut into narrow strips the gummed paper, and after wetting it in your mouth, lay it across the stem and parts that you wish to secure to the paper. The label may be written upon this gummed paper, and laid over some part of the stem, and will aid in holding the plant to the paper; in this case two specimens should be preserved so as to show both sides of the leaf.

To preserve specimens from the depredations of insects, make a saturated solution of *corrosive sublimate*, in fourth proof alcohol, then add an equal bulk of water, and with this solution wet the parts of the plants attacked.

## xii DIRECTIONS FOR DRYING AND PRESERVING PLANTS.

### CASE FOR GENUS COVERS.

After having thus attached the plants to white paper, all the Species of the same Genus should be placed together in the fold of a strong sheet of brown paper and the name of the Genus written or printed on the corner, and these should be arranged in the order of the Flora, and laid in a case constructed for the purpose with pigeon holes eighteen inches deep and thirteen inches wide. A very cheap case can be made for a small collection, by taking packing-boxes, used for packing sale boots, and placing shelves in them. These boxes are made about a foot wide, and may be had for a few cents at almost any country or village store.

## SUGGESTIONS TO TEACHERS.

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BOTANY furnishes the most interesting, convenient, and diversified field for the study of nature.

The teachers of the schools in our rural districts are especially favored in being surrounded by the objects for the practice of this pursuit.

Every teacher should have some favorite study to occupy his leisure hours, and none can be more interesting and inviting for a resident in the country than Botany.

The pursuit of any department of science will soon impress upon the learner the great importance of thorough investigation and minute accuracy.

The teacher, *especially*, is benefited by the training it affords, he will not only come to see the necessity for accuracy in his investigations, but he will imperceptibly fall into the habit of minute and clear description in imparting instruction. It will necessarily teach him to require verbal accuracy in recitations, the great secret of all successful instructors. He will be introduced, also, to other departments of knowledge as accessories. Let him so far pursue the study of Botany as to become interested in it, and he will become a frequent and delighted visitor within the portals of other useful branches of science.

### DIRECTIONS FOR SECURING ASSISTANCE.

As I am addressing teachers allow me to put these suggestions in the form of a familiar talk with an individual.

Having provided yourself with suitable books\* and apparatus, select from the catalogue of living Botanists the name of a person with whom

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\* As Floras, "Gray's Manual" and "Wood's Botanist and Florist," are the best. Gray's lessons should be carefully studied. The Key to the natural orders in "Gray's Field, Forest, and Garden Botany," is the most simple. To insure intelligent progress, careful attention should be given to structure. For this purpose "Gray's Structural Botany" should succeed the Lessons. "Lindley's Ladies' Botany" is a good book for beginners.

to correspond ; collect, dry, and prepare, as already directed, a number of specimens and attach labels to them, numbered 1, 2, 3, etc., and send them in a secure package (a light wooden box of the size of your driers is the best) to your correspondent, who will return you the generic and specific names of numbers 1, 2, 3, etc., which you can write on your own labels of the corresponding numbers.

N. B.—Having named your plants, take your Flora and study the characters of the Order, Genus, and Species of each plant, and you will soon be independent of all assistance except such as you will be able to get from your books.

# BOTANICAL DIRECTORY,

## FOR

### NORTH AMERICA AND THE WEST INDIES.

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#### BRITISH AMERICA.

Bailey, Prof. L. W., Fredericton, N. B.  
 Barnston, G., Montreal, Canada.  
 Bell, Prof. Robert, Ontario, Canada.  
 Cormac, W. C., New Westminster, British  
 Columbia.  
 Dawson, Principal J. W., LL.D., McGill  
 University, Montreal, Canada.  
 Drummond, A. T., Montreal, Canada.  
 Fowler, Rev. James, Bass River, N. B.  
 How, Prof. Henry, Windsor, N. S.  
 Jack, Peter, Halifax, N. S.  
 Jones, Lloyd, Victoria, British Columbia.  
 Lawson, Prof. Geo., Halifax, N. S.

Lindsay, A. W. H., Halifax, N. S.  
 Mackay, A. H., Pictou, N. S.  
 Macoun, Prof. John, Belleville, Ontario,  
 Canada.  
 Matthew, Geo. F., Custom House, St. John,  
 N. B.  
 McCord, D. R., Montreal, Canada.  
 Roy, Mrs. William, Owen Sound, Ontario,  
 Canada.  
 Saunders, Wm., Dundas street, London,  
 Canada.  
 Sturton, Samuel, Quebec, Canada.  
 Watt, David A. P., Montreal, Canada.

#### UNITED STATES.

##### ALABAMA.

Harvey, Wm., Mobile.  
 Mohr, Ch., Mobile.  
 Peters, Thomas M., Moulton.  
 Tutwiler, Miss Julia S., Havana P. O. *Absent in Europe.*

##### CALIFORNIA.

Ames, Mrs. Mary E. P., Taylorsville (Indian  
 Valley), Plumas Co.  
 Anderson, Dr. C. L., Santa Cruz.  
 Bloomer, H. G., San Francisco.  
 Bolander, Prof. H. N., San Francisco.  
 Carr, Dr. (Ezra?), San Francisco?  
 Cooper, Dr. J. G., San Francisco.  
 Gibbons, Dr. Wm. P., Alameda.  
 Kellogg, Dr. A., San Francisco.  
 Lemmon, J. G., Sierraville, Sierra Co.  
 Muir, John, Yosemite Valley.  
 Stiver, Dr. Chas. A., San Francisco.  
 Wood, Mary E., Santa Cruz.

##### COLORADO.

Brandegee, Townshend S., Cañon City.

Boyd, David, Greeley.  
 Greene, Rev. E. L., Pueblo (or Greeley?).

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Antisell, Prof. Thomas, M.D., Washington.  
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 Billings, Dr. J. S., U. S. Army, Washington.  
 Chickering, Prof. J. W., Washington.  
 Clark, Prof. Frank W., Howard University,  
 Washington.  
 Coulter, J. M., Washington.  
 Hayden, Prof. E. V., Washington.  
 Saunders, Wm., Dept. of Agric., Washing-  
 ton.  
 Schott, Dr. Arthur, Georgetown.  
 Seaman, W. H., Dep. of Agric., Washington.  
 Smith, W. R., U. S. Bot. Garden, Washing-  
 ton.  
 Vasey, Dr. Geo., Dep. of Agric., Washington.

##### CONNECTICUT.

Alcott, Rev. W. P., Greenwich.  
 Allen, Dr. T. P., Litchfield.  
 Barratt, Dr. Joseph, Middletown.  
 Brewer, Prof. Wm. H., New Haven.

Denslow, Herbert, New Canaan.  
 Eaton, Prof. Daniel C., New Haven.  
 Edwards, Miss Sara, New Haven.  
 Elmore, Samuel E., Hartford.  
 Hall, Franklin W., New Haven.  
 Hollister, G. H., Litchfield.  
 Marshall, M. A., New Haven.  
 Richards, James, Litchfield.  
 Rounds, C. C., Farmington.  
 Wilcoxson, Dr. L. D., Box 386 P. O., New Haven.  
 Wright, Charles, Wethersfield.

## DAKOTA.

Dr. W. Matthews?

## DELAWARE.

Canby, Wm. M., 1101 Delaware Ave., Wilmington.  
 Commons, A., Centreville, New Castle Co.  
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 French, Prof. G. H., Ill. Agric. Col., Irvington.  
 Hale, Dr. E. M., Chicago.  
 Hall, Elihu, Athens, Menard Co.  
 Hartley, Fielden, Alton.  
 Hill, Prof. E. J., Kankakee.  
 Holmes, Miss Mary E., Rockford.  
 Hubbard, Miss Sarah A., office of *Evening Post*, 86 Dearborn street, Chicago.  
 Hurd, Prof. A., Galesburg.  
 Johnson, Dr. H. A., Chicago.  
 Jordan, Miss Mary E., Decatur.  
 Kemp, Prof. A. G., Galesburg.  
 Livingston, Prof. Wm., Galesburg.  
 Mead, Dr. S. B., Augusta, Hancock Co.  
 Milligan, Mrs. J. M., Box 458, Jacksonville.  
 Morgan, R. T., Wheaton.  
 Norton, Miss M. E. B., Rockford.  
 Patterson, H. N., Oquawka, Henderson Co.  
 Pech, E., Chicago.  
 Pool, Isaac A., 829 Washington street, Chicago.  
 Potter, Prof. B. S., Springfield.  
 Rand, Wm. H., Chicago.

Rauch, Dr. J. H., Chicago.  
 Schan, Dr. Felix, Chicago.  
 Sewell, Dr. J. A., Normal.  
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 Steward, Dr. J. T., Peoria.  
 Warne, H. A.  
 Wellman, C. P., Maquon.  
 Williams, John, Fountindale.  
 Wolf, John, Canton, Fulton Co.  
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Arthur, J. C., Charles City.  
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 Harbour, G. P., Oskaloosa.  
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 Mudge, Prof. B. E., Manhattan.  
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 Snow, Prof. Frank H., Lawrence.  
 Wilson, James, Leavenworth.

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## LOUISIANA.

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## MAINE.

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Hayes, Prof. B. F., Lewiston.  
Hilgard, Prof. Theo. C., U. S. Coast Survey.  
Scribner, F. Lamson, Augusta.  
Vinal, Rev. C. C., Kennebunk.

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Clark, R. B., Fitchburg.  
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Dame, L. L., Stoneham.  
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Faxon, Walter, Cambridge.  
Fowler, Samuel P., Danvers.  
Francis, Dr. G. E., Worcester.  
Goodale, Prof. Geo. L., Cambridge.  
Gray, Dr. Asa, Botanic Garden, Cambridge.  
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Hedge, F. H., Jr., Cambridge.  
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Hitchings, E. H., 40 Chambers street, Boston.

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Hosmer, Miss Eliza, Medford.  
Hosmer, Miss Jane, Concord.  
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Jesup, Rev. H. G., Amherst.  
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Palmer, Dr. Edward, Peabody Museum, Cambridge.  
Parker, Prof. Wm. A., Amherst.  
Peck, Rev. David, Sunderland.  
Phippen, Geo. D., Salem.  
Piper, Mrs. S. M., Tolland.  
Pratt, Minot, Concord.  
Putnam, F. W., Naturalist's Agency, Salem.  
Rand, E. S., Jr., Glen Ridge, Dedham.  
Robbins, Dr. J. W., Uxbridge.  
Robinson, John, Salem.  
Ross, Waldo, Jamaica Plain.  
Sargent, Chas. Sprague, Brookline.  
Scott, J. G., Westfield.  
Seelye, Rev. Mrs. S. T., East Hampton.  
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 Flint, Wm. F., Richmond.  
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 Treat, Mrs. Mary, Vineland.  
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 Beauchamp, Rev. M. W., Kings Ferry, Cayuga Co.  
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 Carter, Dr. Francis, Columbus.  
 Cassells, Prof. J. Lang, Hudson.  
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 Curtis, Dr. Josiah, Knoxville.

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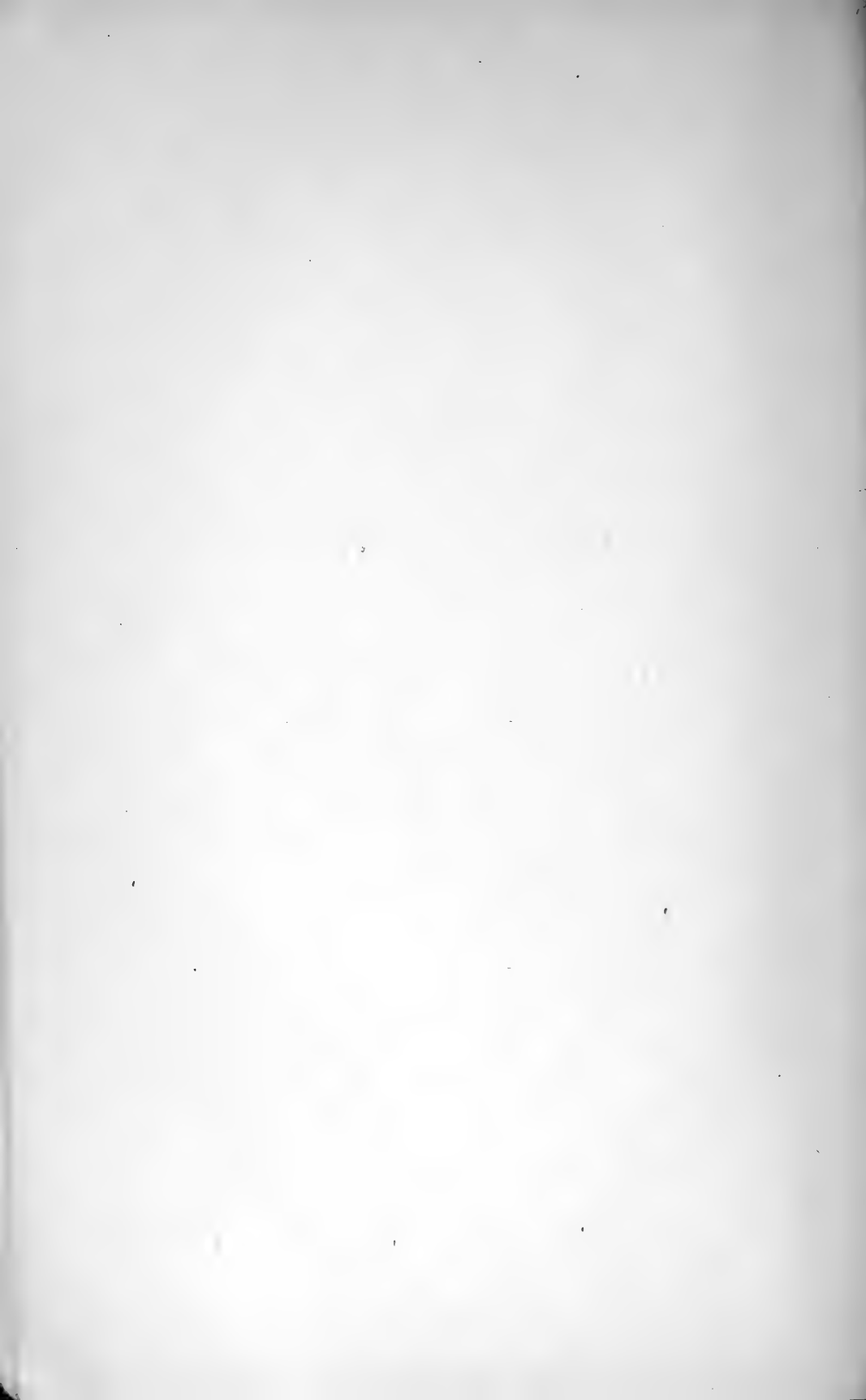
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 Douglas, Dr. James S., Milwaukee.  
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## RESIDENCE UNKNOWN.

Burbank, Prof. I. S.  
 Holzer, Rev. L.  
 Shattuck, Miss M. M.

## WEST INDIES.

- |  |  |
|--|--|
| <p>Blain, José, near Santa Cruz, Jurisdicción<br/>de San Cristobal, Cuba.<br/>Court, Dr. L., Port of Spain, Trinidad.<br/>Dahl, Christian, St. Croix.<br/>Gundlach, Juan (Johannes), Havana, Cuba.<br/>Krebs, Henry, St. Thomas.<br/>March, W. T., Spanishtown, Jamaica.</p> | <p>Morales, Dr. Sebastian Alfredo de, Calle de<br/>Velarde No. 5, Matanzas, Cuba.<br/>Presas, Manuel J., <i>ibidem</i>.<br/>Sauvalle, Francisco Adolfo, Havana, Cuba.<br/>Wilson, Nathaniel, Botanic Gardens, Bath,<br/>Jamaica.</p> |
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# CATALOGUE OF PLANTS.

## SERIES I.

### PHÆNOGAMOUS OR FLOWERING PLANTS.

#### CLASS I. DICOTYLEDONOUS OR EXOGENOUS PLANTS.

##### ORDER 1. **RANUNCULACEÆ.** CROWFOOT FAMILY.

**Clematis**, L. (Virgin's Bower—Traveler's Joy.)

**C. verticillaris**, DC. Along the Delaware River above Phillipsburg. (*Prof. Porter.*)

**C. Virginiana**, L. Leaves divided into three parts; the parts lance-ovate; coarsely toothed, sometimes cut with deep incisions, or lobed; occasionally heart-shaped at the base. Flowers white. July to September. The stamens and pistils are borne on different flowers. Late in autumn the plant presents a remarkable appearance, the long, whitish, silky plumes in which the carpels terminate, make it resemble masses of wool thrown upon the low shrubby over which the plant climbs, sometimes to the extent of thirty feet.

*Habitat.*—Along streams and rich damp hedge-rows. Scattered sparingly throughout the State. Bears cultivation well, but is not thereby improved in appearance.

**Anemone**, L. (Wind-Flower.)

**A. Virginiana**, L. Extremely rare.

**A. nemorosa**, L. (Wind-flower.) Said to be called wind-flower because many of the species are found in windy exposures. This, however, is not especially the case with *A. nemorosa*, for it seems to delight in the borders of damp meadows and in sunny nooks of fences and hedge-rows.

It bears a single flower on a slender stem, just below which is a whorl of three trifoliate leaves. Leaflets toothed, pale underneath. Flower white or purplish, with five petals. March to May. New Egypt, O., Middletown, M., and Princeton.

**Hepatica**, Dill. (Liver-leaf—Liverwort.)

**H. triloba**, Chaix. Flowers purple; scapes hairy; calyx consists of three parts—ovate, obtuse, silky hairy—separated from the petals. Flower

varying from deep purple to a dingy white. March to May. I have collected this plant in the woods near Princeton, in February, in full flower. The leaves vary in form from three to four, rarely five, distinct rounded lobes to kidney shape; sometimes cordate, the early leaves covered with silky hairs, especially when the plant is found on dry hill-sides. Bears cultivation well.

**Thalictrum**, Tourn. (Meadow-Rue.)

**T. anemonoides**, Michx. (Rue-leaved anemone.) Stem, six to eight inches high; root-leaves on petioles nearly or quite the length of the stem; twice three divided; stem-leaves in a whorl just below the flowers, and ternate; parts rounded and heart-shaped at the base. Flowers white, in a cluster at the summit of the stem. Found on southern exposures of dry, wooded hill-sides, usually near trees or stumps, common.

**T. dioicum**, L. Princeton, not common.

**T. Cornuti**, L. Meadows and along streams, common.

**Ranunculus**, L. (Crowfoot—Buttercup.)

**R. aquatilis**, L.

*Var.* **R. divaricatus**, Gray. Squan and Shark rivers, rare.

**R. pusillus**, Poir. This species is so different from the general character of the genus that it needs a passing notice. The young botanist, after inspecting *R. repens*, which appears among the early spring flowers, would not suspect this to be *Ranunculus*. I have never found it in any place except the swamp near Penn's Neck, about two miles east of Princeton. It delights in damp places, growing almost in the water, has a long stem, from two to three feet in extent, which is always prostrate unless held up by surrounding plants. The leaf is lance-shaped; flowers bright yellow, smaller than *R. repens*.

**R. reptans**, I have never seen growing in the State. I put it down on the authority of Dr. Torrey. Prof. Porter reports it as growing along the Delaware, above Phillipsburg.

**R. Cymbalaria**, Pursh. Head of Barnegat Bay, near Point Pleasant, near salt water, quite rare. O.

**R. abortivus**, L. Shady hill-sides and banks of streams, common.

**R. sceleratus**, L. Wet ditches and pools, near New Egypt, common above Lawrenceville.

**R. recurvatus**, Poir. Shady hill-sides and banks of streams, common about Princeton and Hightstown.

**R. Pennsylvanicus**, L. Princeton, Freehold.

**R. fascicularis**, Muhl. Meadow woods, near Squan Village, also about Hightstown and open woods near Freehold, M.

**R. repens**, L. (Buttercup.) This is one of the plants that first greets us in spring with its flowers, appearing in April and continuing throughout the summer. It is very variable, and the young botanist is likely to mistake its different forms for separate species. It flowers first in south exposures of wooded hills. The flowers are large, bright yellow, grow-



ing paler with age. Accurately described in Gray and Wood. Found throughout the State.

**R. bulbosus**, L. Toms River, O. and Mer., rare.

**R. acris**, L. Is our common buttercup, and loves damp meadows, but does not refuse to adorn the roadsides of all these localities. It varies from one to three feet in height. In damp and wet places it is almost free from pubescence, while in dry places the stem and leaves are supplied with hairs. Well described in Gray and Wood. New Egypt, O. and M., common.

**Caltha**, L. (Marsh Marigold—Cowslip.)

**C. palustris**, L. This plant is found sparingly in Mer. and M. Is not generally used for greens in these borders, but in Rockland County, N. Y., where it grows in great abundance, it was once a favorite pot-herb and is called there Meadow Beauty.

**Trollius**, L. (Globe-flower.)

**T. laxus**, Salisb. Sussex. (*Porter*.)

**Coptis**, Salisb. (Gold-thread.)

**C. trifolia**, Salisb. Found sparingly in the western part of Mer.

**Helleborus**, L. (Hellebore.)

**H. viridis**, L. W. (*Knighton*.)

**Aquilegia**, Tourn. (Columbine.)

**A. Canadensis**, L. Found sparingly in the hills back of Princeton, in the eastern parts of M. Bears cultivation well.

**A. vulgaris**, L. Belvidere. (*Knighton*.)

**Delphinium**, Tourn. (Larkspur.)

**D. azureum**, Michx. W. (*Knighton*.)

**Hydrastis**, L. (Orange-root—Yellow puccoon.)

**H. Canadensis**, L. W. (*Knighton*.)

**Actæa**, L. (Baneberry.)

**A. spicata**, L. var. *ruora*, Michx. Common about Princeton and Lawrenceville, Mer., and Cream Ridge, M.

**A. alba**, Bigel. Near Princeton, in the hills.

**Cimicifuga**, L. (Bugbane.)

**C. racemosa**, Ell. Common in Mer. about Lawrenceville. (*Lanning*.)

**C. Americana**, Michx. Belvidere. (*Knighton*.)

ORDER 2. **MAGNOLIACEÆ.** MAGNOLIA FAMILY.**Magnolia**, L. (Magnolia.)

**M. glauca**, L. (Sweet Bay, called by some Swamp Sassafras.) This plant is admired for its beautiful green foliage, which is semi-evergreen, resembling in form the leaves of the *grandiflora*. It likes wet places, but does well under cultivation from the middle of the State southward. A very large fine specimen is growing in the grounds recently owned by the late Judge Field, of Princeton.

**Liriodendron**, L. (Tulip-tree—White-wood.)

**L. Tulipifera**, L. This noble tree grows sparingly throughout the western parts of M. and all over Mer., in the northern parts of Bur. and southern parts of Mid., in the woods of W., and throughout Mor.

ORDER 3. **ANONACEÆ.** CUSTARD-APPLE FAMILY.**Asimina**, Adans. (North American Papaw.)**A. triloba**, Dunal. W. (*Knighton*.)ORDER 4. **MENISPERMACEÆ.** MOONSEED FAMILY.**Menispermum**, L. (Moonseed.)**M. Canadense**, L. M. (*Dr. Torrey*.)ORDER 5. **BERBERIDACEÆ.** BARBERRY FAMILY.**Berberis**, L. (Barberry.)**B. vulgaris**, L. Near Red Bank, M., not common.**Podophyllum**, L. (Mandrake—Love-apple.)

**P. peltatum**, L. This is a striking plant in appearance on account of its shield-shaped leaves. The fruit is collected and eaten by children; it has a sweetish insipid taste. The root is medicinal, and is administered to excite the liver. Near Princeton and Cream Ridge, in M., abundant in W.

ORDER 6. **NYMPHÆACEÆ.** WATER-LILY FAMILY.**Brasenia**, Schreber. (Water-shield.)

**B. peltata**, Pursh. Near Barrsville, O., and Shark River, Mo., not common.

**Nelumbium**, Juss. (Nelumbo—Sacred Bean.)**N. luteum**, Willd. Mill-pond, Woodstown, W.**Nymphæa**, Tourn. (Water-Nymph—Water-Lily.)**N. Odorata**, Ait. Ponds and stagnant pools, common.*Var. minor*, Sims. Southern Jersey, common.

**Nuphar**, Smith. (Yellow Pond-Lily—Spatter-Dock.)

**N. advena**, Ait. Still or stagnant water, common.

ORDER 7. **SARRACENIACEÆ**. PITCHER-PLANTS.

**Sarracenia**, Tourn. (Side-saddle Flower—Pitcher-Plant.)

**S. purpurea**, L. This plant deserves notice on account of its singular leaves, which grow in the form of cups. The flower is also remarkable. The inner surface of the cups is thickly besprinkled with stiff hairs; and the cups themselves are usually partly filled with water, in which insects, mostly flies, have perished, giving rise to the conjecture that the plant is insectivorous, and the pitcher-shaped leaf is furnished with hairs for the purpose of entrapping its prey, which having got in, the stiff hairs with which the surface is armed prevent them from crawling out. Found in the swamp near Penn's Neck, east of Princeton, in M., near Freehold.

Found in Camden. (*W. M. Canby*.)

ORDER 8. **PAPAVERACEÆ**. POPPY FAMILY.

**Argemone**, L. (Prickly Poppy.)

**A. Mexicana**, L. Waste places, not common.

**Chelidonium**, L. (Celandine.)

**C. majus**, L. Waste grounds, near dwellings, rare.

**Sanguinaria**, Dill. (Blood-root.)

**S. Canadensis**, L. This is one of the most charming of the early spring flowers. It has a pure white flower and a leaf easily pressed and preserved in its natural shape.

When the root is broken or cut, a red juice issues from the wound, hence the name. Princeton, and upper parts of M., not common.

ORDER 9. **FUMARIACEÆ**. FUMITORY FAMILY.

**Adlumia**, Raf. (Climbing Fumitory.)

**A. cirrhosa**, Raf. Belvidere. (*Knighton*.)

**Dicentra**, Bork. (Dutchman's Breeches.)

**D. Cucullaria**, DC. (Blood-root.) Princeton, not common. The southern part of the State. (*Canby*.)

**Corydalis**, Vent. (Corydalis.)

**C. aurea**, Willd. Princeton, Mer.

**C. glauca**, Pursh, Princeton, Mer. Paterson. (*J. C. Hornblower*.)

**Fumaria**, L. (Fumitory.)

**F. officinalis**, L. Princeton and Hightstown, Mer., not common.

ORDER 10. **CRUCIFERÆ.** MUSTARD FAMILY.**Nasturtium**, R. Br. (Water-Cress.)

**N.** *Armoracea*, Fries. (Horse-radish.) Banks of streams and damp soil, not rare.

**Dentaria**, L. (Toothwort—Pepper-root.)

**D.** *laciniata*, Muhl. Freehold, M., not common. Camden. (*W. M. Canby.*)

**Cardamine**, L. (Bitter Cress.)

**C.** *rhomboidea*, DC. Wet meadows and springs, rare.

**C.** *rotundifolia*, Michx. Cool, shaded springs, Middletown, Freehold, M., very rare.

**C.** *hirsuta*, L. Princeton, Hightstown, Mer., Freehold, M., sparingly.

**Arabis**, L. (Rock Cress.)

**A.** *lyrata*, L. Shady places, not common.

**A.** *hirsuta*, Scop. Mer., near Hightstown.

**A.** *lævigata*, DC. Mer., Hightstown; M. Freehold.

**A.** *Canadensis*, L. Damp woods, Freehold.

**Barbarea**, R. Br. (Winter Cress.)

**B.** *vulgaris*, R. Br. Very showy, common in oat-fields.

**Sisymbrium**, L. (Hedge Mustard.)

**S.** *officinale*, Scop. About dwellings, not rare.

**S.** *Thalianum*, Belvidere. (*Knighton.*)

**Sinapis**, Tourn.

**S.** *alba*, L. (White Mustard.) Waste places, rare.

**S.** *arvensis*, L. (English Charlock.) Common in cultivated fields and about gardens.

**S.** *nigra*, L. (Black Mustard.) Fields and waste places; furnishes the mustard of our tables, common near dwellings.

**Draba**, L. (Whitlow-Grass.)

**D.** *Caroliniana*, Walt. Camden. (*Canby.*)

**D.** *verna*, L. Sandy waste places and fields, common.

**Alyssum**, Tourn. (*Alyssum.*)

**A.** *maritimum*, L. In cultivation, W. (*Knighton.*)

**Camelina**, Crantz. (False Flax.)

**C.** *sativa*, Crantz. Flax-fields, not common.

**Capsella**, Vent. (Shepherd's Purse.)

**C.** *Bursa-pastoris*, Mönch. Waste places and about dwellings.

**Thlaspi**, Tourn. (Pennycress.)

**T. arvense**, L. Common.

**Lepidium**, L. (Pepperwort—Peppergrass.)

**L. Virginicum**, L. Road-sides and waste places, common.

**L. campestre**, L. Camden. (*Canby*.)

**Oakile**, Tourn. (Sea-Rocket.)

**O. Americana**, Nutt. Coast, Cape May, common. (*Canby*.)

**Raphanus**, L. (Radish.)

**R. Raphanistrum**, L. A troublesome weed, M.

#### ORDER 13. **VIOLACEÆ**. VIOLET FAMILY.

**Viola**, L. (Violet—Heart's-ease.)

**V. lanceolata**, L. (Lance-leaved Violet.) Quite smooth, lanceolate, tapering into a long petiole, obscurely toothed, or entire; leaves generally a little longer than the scapes; 4-6 in. high—flowers white, inodorous, striped with purple lines, spur short; sepals lanceolate; petals beardless. Common in damp meadows in the eastern part of Mer. and northern parts of M. April to June.

**V. primulæfolia**, L. Smooth, varying from cordate, broad ovate, to lanceolate, tapering into a winged petiole, slightly repand or crenate; when growing in dry places sparingly pubescent; sepals lanceolate; stigma beaked; flowers white, striped with purple streaks, slightly odorous; petals slightly bearded, especially the lateral ones. April to July. Wet meadows; growing with *V. lanceolata* and *V. blanda*, and seems to be a connecting link between them. I have seen specimens that seemed to possess the characteristics of both. Dr. Beck suggests that it may be identical with *V. lanceolata*, but my observations do not lead me to that conclusion. I should sooner take it to be a variety of *V. blanda*; its flowers are odorous like *V. blanda*; its foliage more nearly approaches that of *V. blanda* than of *V. lanceolata*, 4-6 in. high. Scattered sparingly over the entire limits of the three counties, M., O., and Mer.

**V. blanda**, Willd. Leaves cordate or sub-reniform, crenate or sub-entire, early ones sub-orbicular, with the head of the sinus rounded. Flowers white, odorous, and small; sepals ovate; petals ovate, obtuse, striped with purple. Common, growing in damp grounds. April to June. 3-5 in. high.

**V. cucullata**, Ait. Glabrous leaves cordate, cuculate at the base, serrate; toothed, distinctly nerved; radical ones sometimes sub-reniform or broad cordate; frequently purple on the under side near the base. Flowers blue, large, sepals linear, lanceolate; upper petal smooth, the others bearded, lateral ones, obovate. Spur short and rounded. Common throughout these limits, growing in wet grounds. March to July. 6-12 in. high.

*Var. striata*; admits of the above description except that its flowers are lighter and striped with dark lines. 4-8 in. high, rare. I have seen but few specimens, and those were found in low ground about half a mile east of Freehold.

*Var. palmata*. Form No. 1. Leaves varying from broad cordate to reniform, repand toothed, sparingly cuculate at base; whole plant slightly pubescent; radical leaves, purple above. Growing in dry grounds and open woods. 6-10 in. high.

Form No. 2. Early leaves, broad cordate, or reniform, somewhat fleshy, on short petioles, under side frequently purple, serrate toothed, usually two or three in number, rarely many; later leaves usually two to four in number, on long petioles, three lobed, the middle lobe sometimes lanceolate, occasionally with parallel sides, and terminating in a blunt angle, the lateral lobes hatchet-shaped, with the margins sometimes serrate toothed, sometimes deeply cut into two or three divisions. The whole leaf is frequently divided into narrow parts, approaching *V. pedata*. Again, the whole margin will be made up of divisions, varying in number from six to twelve, and from an eighth to half an inch in width, the middle one generally the broadest, and the incisions extending half way into the blade. The early leaves are usually smooth, the later ones covered with pubescence. Flowers apetalous and frequently subterranean. Growing abundantly about Freehold. Dry grounds and open woods. May to August. 6-12 in. high.

I watched this plant closely throughout three successive seasons in the same localities, and it seems to depart from the distinctive characters of *V. cuculata* as its distance from damp ground increases. I placed specimens with divided leaves in the lawn of the Freehold Institute, in damp, rich soil, and in the course of four years they were free from pubescence, the leaves entire, and in every way identical with *V. cuculata* growing within ten feet of it. I also saw specimens which had been transplanted into a dry, gravelly, rather sterile border, in Flushing, on Long Island, and they retained their pubescence and divided leaves.

*V. sagittata*, Ait. Leaf entirely smooth, when growing in damp soil; slightly pubescent when growing in dry soil. Sub-linear, lanceolate; sometimes triangular; sparingly toothed or cut-toothed at the base. 4-10 in. high. Flower deep blue; petals obovate, and emarginate; sepals lanceolate, acute, growing abundant about Lawrenceville; scattered sparingly over the entire limits. April to July.

*Var. ovata*, Nutt. Leaves oblong-ovate, crenate, repand toothed near the base; pubescent; stipules ciliate; flowers large and dark. Growing in dry, open woods; sandy soil. Abundant in M. April to May. 2-4 in. high.

*Var. emarginata*, Le Conte, I have not detected in these limits.

*V. pedata*, L. Leaves pedate, 5 to 9 parted, segment linear, sub-lanceolate; middle segments frequently toothed. Flowers large, pale blue, conspicuous. This beautiful species is so distinct as to require a very brief description. It abounds in M. Its flowers are the largest and most showy of all the species found in the State.

**V. Muhlenbergii**, Torr. Stem slender, much branched, leaves smooth, sub-reniform, or broad cordate, crenate, serrate. 4-12 in. high. Growing in damp meadows. Abundant about Freehold.

**V. Canadensis**, L. Stemmed; leaves cordate; somewhat acuminate, serrate; stipules broad, lanceolate; spur short. Flowers pale blue or white; petals marked with blue lines. Stem, 12-18 in. high. Damp woods, northern part of the State. (*Knighton*.)

**V. pubescens**, Ait. Covered with a soft pubescence; leaves few, broad, cordate, toothed near the summit of the stem, varying from 1-3 in. broad. Flowers, pale yellow—the only yellow violet in the State. Shady woods and copses. Found sparingly throughout the middle counties. A form of this species is found at Cream Ridge, in M., with unusually large orbicular leaves, growing on a hill-side, over red shale.

**V. tricolor**, L. Stem leafy, angled; leaves, ovate, cordate; stipules lacinate toothed. Stem much branched. Flowers variegated. This is undoubtedly a variety of the cultivated pansy, escaped from gardens. Found in the fields near Trenton, not common. I have never seen it growing without cultivation in any other locality in the State.

#### ORDER 14. **CISTACEÆ**. ROCK-ROSE FAMILY.

**Helianthemum**, Tourn. (Rock-rose.)

**H. Canadense**, Michx. Sandy or dry gravelly soil.

**H. corymbosum**, Michx. Sandy or barren soil near the coast, not as common as the last.

**Hudsonia**, L. (*Hudsonia*.)

**H. ericoides**, L. Dry pine barrens, quite common in O. and M.

**H. tomentosa**, Nutt. Dry sandy coast and occasionally several miles inland, common in O.

**Lechea**, L. (Pinweed.)

**L. major**, Michx. Barren sandy fields, common.

**L. thymifolia**, Pursh. Barren sandy fields one mile west of Good-Luck Meadows, near Toms River, O., rare.

**L. minor**, Lam. Dry open woods and road-sides, very common.

#### ORDER 15. **DROSERACEÆ**. SUNDEW FAMILY.

**Drosera**, L. (Sundew.)

**D. rotundifolia**, L. Peat-bogs, common.

**D. longifolia**, L. Peat-bogs, common.

**D. filiformis**, Raf. Peat-bogs or wet sandy soil, neglected roads. These three species are frequently found growing within the space of a few feet of each other.

ORDER 16. **HYPERICACEÆ.** ST. JOHN'S-WORT FAMILY.**Ascyrum**, L. (St. Peter's-wort.)

- A.** stans, Michx. Borders of thickets, pine-barrens, common.  
**A.** Crux-Andree, L. Hill-sides and thickets, common.

**Hypericum**, L. (St. John's-wort.)

- H.** pyramidatum, Ait. On the Delaware. (*Porter.*)  
**H.** prolificum, L. Swamps in pine barrens, Manchester, O., common.  
*Var.* densiflorum, Gray. With the above, O., common.  
**H.** adpressum, Barton. Mer., near Freehold.  
**H.** angulosum, Michx. Wet pine-barrens, not common.  
**H.** perforatum, L. Pastures and meadows, fortunately not common.  
**H.** corymbosum, Muhl. Damp or shady places, not common.  
**H.** mutilum, L. Low grounds, common everywhere.  
**H.** Canadense, L. Wet sandy places, common.  
**H.** Sarrhthra, Michx. Both wet and dry sandy fields, common.

**Elodea**, Adans. (Marsh St. John's-wort.)

- E.** Virginica, Nutt. In sandy swamps, common.

ORDER 17. **ELATINACEÆ.** WATER-WORT FAMILY.**Elatine**, L. (Water-wort.)

- E.** Americana, Arnott. Hightstown, Mer.

ORDER 18. **CARYOPHYLLACEÆ.** PINK FAMILY.**Saponaria**, L. (Soap-wort.)

**S.** officinalis, L. (Soap-wort—Bouncing Bet.) This very showy and really pretty plant, in spite of the neglect with which it meets, adorns the road-sides, near dwellings, all over the northeastern parts of the State. Introduced from Europe and escaped from gardens.

**Vaccaria**, Medik. (Cow-Herb.)

- V.** vulgaris, Host. Partly naturalized, rare

**Silene**, L. (Catchfly—Campion.)

- S.** stellata, Ait. Banks of Shark River, M., rare.  
**S.** Pennsylvania, Michx. Sandy woods, not common.  
**S.** Virginica, L. Near Camden. (*Canby*) Warren. (*Knighton.*)  
**S.** Armeria, L. Mer. (*Dr. Torrey.*)  
**S.** antirrhina, L. Dry soil and barren sandy fields, rare.  
**S.** noctiflora, L. Warren. (*Knighton.*)

**Lychnis**, Tourn. (Lychnis—Cockle.)

- L.** Githago, Lam. Wheat-fields, too common.



**Arenaria, L.** (Sand-wort.)**A.** *serpyllifolia*, L. Sandy waste places, not rare.**A.** *squarrosa*, Michx. Near sea-coast, M.**A.** *stricta*, Michx. Hun. (*Porter.*)**A.** *lateriflora*, L. Budds Lake, Mor. (*Porter.*)**A.** *peplodes*, L. (*Honkenya peplodes*, Ehrh.) Sandy sea-beach, not rare. Atlantic City. (*Canby.*)**Stellaria, L.** (Chickweed—Star-wort.)**S.** *media*, Smith. Fields and around houses, common.**S.** *pubera*, Michx. Freehold, M., not rare.**S.** *longifolia*, Muhl. Princeton and Hightstown, Mer.**Cerastium, L.** (Mouse-ear—Chickweed.)**C.** *vulgatum*, L. Grassy banks, not common.**C.** *viscosum*, L. Grassy fields and copses, common.**C.** *nutans*, Raf. Moist places, O., common.**C.** *arvense*, L. M. (*Dr. Torrey.*) W. (*Knighton.*)**Sagina, L.** (Pearl-wort.)**S.** *procumbens*, L. Damp or springy places, not common.**S.** *apetala*, L. Mer. and M. (*Dr. Torrey.*)**Spergularia, Pers.** (Sand-Spurrey.)**S.** *rubra*, Pers. Sandy soil near the coast, common.*Var.* *marina*, Gray. Sea-coast, common.**Spergula, L.** (Spurrey.)**S.** *arvensis*, L. Grain fields, common.**Anychia, Michx.** (Forked Chickweed.)**A.** *dichotoma*, Michx. In dry and also moist soil, rare.**Scleranthus, L.** (Knewel.)**S.** *annuus*, L. Sandy waste places, not rare.**Mollugo, L.** (Indian Chickweed.)**M.** *verticillata*, L. Sandy river banks and cultivated grounds; in gardens, a troublesome weed, common.ORDER 19. **PORTULACACEÆ.** PURSLANE FAMILY.**Sesuvium, L.** (Sea Purslane.)**S.** *Portulacastrum*, L. On the coast, rare.**Portulaca, Tourn.** (Purslane.)**P.** *oleracea*, L. Cultivated grounds and gardens, common.

**Claytonia, L.** (Spring Beauty.)

**C. Virginica, L.** This little plant is one of the most delicate and beautiful of the early spring flowers found throughout the middle counties ; growing in the borders of damp woods, especially in southern exposures. Appearing in April. The flowers are of a rose tint, with darkish veins. Leaves long, lance shaped. In shady copses.

**C. Caroliniana, Michx. W.** (*Knighton.*)

ORDER 20. **MALVACEÆ.** MALLOW FAMILY.**Althæa, L.** (Marsh-Mallow.)

**A. officinalis, L.** Salt marshes, also about mill-ponds inland, common.

**Malva, L.** (Mallow.)

**M. rotundifolia, L.** Door-yards and waste places, common.

**M. sylvestris, L.** Way-sides, rather rare.

**Sida, L.** (Sida.)

**S. spinosa, L.** Waste places, near New Egypt, O.

**Abutilon, Tourn.** (Indian Mallow—Velvet Leaf.)

**A. Avicennæ, Gærtn.** Waste places, a vile weed, common.

**Kosteletzkya, Presl.** (*Kosteletzkya.*)

**K. Virginica, Presl.** Marshes on the coast, rather rare.

**Hibiscus, L.** (Rose-Mallow.)

**H. Moscheutos, L.** Banks of rivers, not rare on the coast and near Trenton.

**H. militaris, Cav. W.** (*Knighton.*)

**H. Trionum, L.** Escaped from gardens, not common.

ORDER 21. **TILIACEÆ.** LINDEN FAMILY.**Tilia, L.** (Linden—Basswood—Lime Tree.)

**T. Americana, L.** This is a graceful tree used for ornamental purposes, and found in the streets of the villages and in private grounds. I have never seen it in a wild state. Dr. Knieskern reports it as growing along the Manasquan River. Common in woods of M. and W. (*Knighton.*)

ORDER 23. **LINACEÆ.** FLAX FAMILY.**Linum, L.** (Flax.)

**L. Virginianum, L.** Dry woods, not rare.

**L. striatum, Walt.** Pines. (*Canby.*)

ORDER 24. **GERANIACEÆ.** GERANIUM FAMILY.**Geranium**, L. (Cranesbill.)

**G. maculatum**, L. (Spotted Cranesbill.) This species is common in the middle counties. Leaves spotted, on long petioles; stems erect, bearing an abundance of large, showy, purple flowers. The plant is far more showy and beautiful than some of the cultivated varieties. Endures cultivation well.

**G. Carolinianum**, L. Barren soil and waste places, common.

**Erodium**, L'Her. (Storksbill.)

**E. cicutarium**, L'Her. Woodbury. (*Canby*.)

**Impatiens**, L. (Balsam—Jewel-weed.)

**I. pallida**, Nutt. W. (*Knighton*.)

**I. fulva**, Nutt. Shady moist places, common.

*Var. alba.* Near Toms River, O., has white flowers, not common.

**Oxalis**, L. (Wood-Sorrel—Sheep-Sorrel.)

**O. violacea**, L. Is common about Freehold; rarely found near Princeton.

**O. stricta**, L. Woods and fields, common.

ORDER 25. **RUTACEÆ.** RUE FAMILY.**Zanthoxylum**, Colden. (Prickly Ash.)

**Z. Americanum**, Mill. M., near Freehold.

ORDER 26. **ANACARDIACEÆ.** CASHEW FAMILY.**Rhus**, L. (Sumach.)

**R. typhina**, L. Mer. (*Dr. Torrey*.) Also in W. (*Knighton*.)

**R. glabra**, L. This species is common throughout the middle parts of the State. The fruit has a pleasant acid, a decoction of which is used as a gargle for ulcerated sore throat. The leaves and bark are used for tanning goat-skins, and are said to make the best Morocco.

**R. copallina**, L. Neglected fields and road-sides, common.

**R. venenata**, DC. (Poison Sumach—Poison Elder—Poison Dogwood.) Is a small tree, from eight to twenty feet high. The poisonous effects of this species are sometimes very severe. Common; growing in swampy places throughout the State.

**R. Toxicodendron**, L. (Poison Vine—Poison Ivy—Poison Oak.) This plant is a vine, fastening itself to the trunks of trees, or to rocks, by numerous rootlets thrown out all along the stem. The leaves are three parted, the parts ovate. It is to be avoided, as it is poisonous to most persons, causing an eruption of the skin, accompanied by an intolerable itching and burning sensation. Low meadows, fence-rows, and thickets, common.

ORDER 27. **VITACEÆ.** VINE FAMILY.**Vitis**, Tourn. (Grape.)**V. Labrusca**, L. Thickets, and along fences, common.**V. æstivalis**, Michx. Thickets, common.**V. cordifolia**, Michx. River banks and thickets, common.**Ampelopsis**, Michx. (Virginian Creeper—American Ivy.)**A. quinquefolia**, Michx. Great climber. Leaves five parted. Woods, and along fences. In rich, damp soils, common.ORDER 28. **RHAMNACEÆ.** BUCKTHORN FAMILY.**Ceanothus**, L. (New Jersey Tea—Red-root.)**C. Americanus**, L. This shrub bears cultivation; it is said to have derived its name of New Jersey Tea from the circumstance that in early times the dried leaves were used for tea. Dry open woods and borders of fields and copses, common.ORDER 29. **CELASTRACEÆ.** STAFF-TREE FAMILY.**Celastrus**, L. (Staff-tree—Shrubby Bitter-sweet.)**C. scandens**, L. I have not found this growing in this State except at Princeton, Mer. Dr. Knighton reports it as growing in W.**Euonymus**, Tourn. (Spindle-tree.)**E. atropurpureus**, Jacq. (Burning-Bush.) Not rare.**E. Americanus**, L. About Freehold, M.ORDER 30. **SAPINDACEÆ.** SOAPBERRY FAMILY.**Staphylea**, L. (Bladder-Nut.)**S. trifolia**, L. Banks of Squan River, rare.**Acer**, Tourn. (Maple.)**A. spicatum**, Lam. (Mountain Maple.) Mountains of W. (*Knighton*.)**A. saccharinum**, Wang. Used as an ornamental tree throughout the State.**A. dasycarpum**, Ehrhart. Used for shade tree, is a very rapid grower, and liable to be broken by high winds; it also grows more straggling than the last.**A. rubrum**, L. Swamps and wet woods, everywhere common.**Negundo**, Mœnch. (Ash-leaved Maple—Box-Elder.)**N. aceroides**, Mœnch. A very thrifty, rapid-growing tree; much used for a shade tree.

ORDER 31. **POLYGALACEÆ.** MILK-WORT FAMILY.**Polygala**, Tourn. (Milk-wort.)

- P. lutea**, L. Low meadows and sandy swamps, common.  
**P. incarnata**, L. Haddonfield. (*Canby*.)  
**P. sanguinea**, L. Damp meadows, not rare.  
**P. fastigiata**, Nutt. Pine barrens, O., not common.  
**P. Nuttallii**, Torr. and Gr. Pines. (*Canby*.)  
**P. cruciata**, L. Margins of swamps, common.  
**P. brevifolia**, Nutt. Along fences and in grain stubbles; in M., not common.  
**P. verticillata**, L. Dry soil, common.  
**P. ambigua**, Nutt. Dry and damp fields, common.  
**P. polygama**, Walt. Dry, sandy soil, rare.  
**P. paucifolia**, Willd. Near Freehold, not common.

ORDER 32. **LEGUMINOSÆ.** PULSE FAMILY.**Lupinus**, Tourn. (Lupine.)

- L. perennis**, L. Sandy fields and woods, common.

**Crotalaria**, L. (Rattle-box.)

- C. sagittalis**, L. Sandy soil, common.

**Trifolium**, L. (Clover—Trefoil.)

- T. arvense**, L. Barren, dry, sandy fields, common.  
**T. pratense**, L. Cultivated for hay and pasture, common.  
**T. repens**, L. Pastures, meadows, etc., common.  
**T. agrarium**, L. Hightstown, Mer., not common.  
**T. procumbens**, L. Freehold, road-sides, and borders of fields, M.

**Melilotus**, Tourn. (Melilot—Sweet Clover.)

- M. officinalis**, Willd. Hightstown and Freehold, Mer. and M., about dwellings.

- M. leucantha**, Koch. W. (*Knighton*.)

**Medicago**, L. (Medick.)

- M. lupulina**, L. Waste places and road-sides, rare.

**Robinia**, L. (Locust-tree.)

- R. Pseudacacia**, L. Cultivated for its valuable timber.  
**R. viscosa**, Vent. Princeton, Mer., not common.

**Wistaria**, Nutt. (Wistaria.)

- W. frutescens**, DC. W. (*Knighton*.)

**Tephrosia**, Pers. (Hoary Pea.)

**T. Virginiana**, Pers. Dry, sandy soil, very common.

**Desmodium**, DC. (Tick-Trefoil.)

**D. nudiflorum**, DC. Dry woods, Middletown, M., rare.

**D. acuminatum**, DC. Copses and fence-rows, as well as damp woods, Princeton, Freehold, and Allentown, common.

**D. rotundifolium**, DC. Dry, sandy fields, O., rare. Common in Mer. and M.

**D. humifusum**, Beck. Belvidere. (*Knighton.*)

**D. canescens**, DC. Mer. near Princeton.

**D. cuspidatum**, Torr. and Gr. Hightstown and Princeton in Mer. and Freehold, M.

**D. lævigatum**, DC. Pines of O., not common.

**D. viridiflorum**, Beck. Belvidere. (*Knighton.*)

**D. Dillenii**, Darlington. Open, sandy woods, O., common.

**D. paniculatum**, DC. Copses and borders of woods, common.

**D. strictum**, DC. Pine woods and neglected fields, rare.

**D. Canadense**, DC. Borders of woods, not rare.

**D. ciliare**, DC. Dry hills and sandy fields, common.

**D. Marilandicum**, Boott. Copses and open woods, common.

**Lespedeza**, Michx. (Bush-Clover.)

**L. procumbens**, Michx. Sandy soil, not rare.

**L. repens**, Torr. and Gray. Dry, sandy fields and open woods, common.

**L. violacea**, Pers. Varieties of this species are common.

**L. Stuevei**, Nutt. Along fences on hill-sides, M., common.

**L. hirta**, Ell. Dry, sandy, barren fields and hill-sides, common.

**L. capitata**, Michx. Varieties of this species occur in dry, sandy or gravelly fields and hill-sides, common.

**Stylosanthes**, Swartz. (Pencil-Flower.)

**S. elatior**, Swartz. Dry, sandy road-sides, rare; common in M.

**Vicia**, Tourn. (Vetch—Tare.)

**V. sativa**, L. Cultivated fields, common.

**V. tetrasperma**, L. Keyport, M. (*S. Lockwood.*)

**V. hirsuta**, Koch. About dwellings in eastern M., common.

**V. Cracca**, L. W. (*Knighton.*)

**V. Caroliniana**, Walt. Hunt. (*Porter.*)

**V. Americana**, Muhl. W. (*Knighton.*)

**Apios**, Boerh. (Ground-nut—Wild Bean.)

**A. tuberosa**, Mœnch. Moist thickets, common.

**Phaseolus**, L. (Kidney Bean.)

- P. perennis**, Walt. W. (*Knighton*.)  
**P. diversifolius**, Pers. Sand-hills, sea-coast, rare.  
**P. helvolus**, L. Sandy fields, common.

**Clitoria**, L. (Butterfly-Pea.)

- C. Mariana**, L. High banks, Toms River, O., rare.

**Amphicarpæa**, Ell. (Hog Peanut.)

- A. monoica**, Nutt. Freehold, M., and Hightstown, Mer.

**Galactia**, P. Browne. (Milk-Pea.)

- G. glabella**, Michx. Pines. (*Canby*.)

**Baptisia**, Vent. (Faise Indigo.)

- B. tinctoria**, R. Br. Dry, sandy soil, common.

**Cercis**, L. (Red-bud—Judas-tree.)

- C. Canadensis**, L. W. (*Knighton*.)

**Cassia**, L. (Senna.)

- C. Marilandica**, L. Alluvial soil, not common. The leaves are sometimes used for medicine. M.  
**C. Chamæcrista**, L. Sandy fields, common.  
**C. nictitans**, L. Sandy fields and road-sides, common.

**Gleditschia**, L. (Honey-Locust.)

- G. triacanthos**, L. Cultivated for ornament.

ORDER 33. **ROSACEÆ**. ROSE FAMILY.**Prunus**, Tourn. (Plum, Cherry, etc.)

- P. Americana**, Marshall. Banks of streams, not common, M.  
**P. maritima**, Wang. Near sea-beach, sandy, open woods, common.  
**P. spinosa**, L. Orange and W. (*Knighton*.)  
**P. pumila**, L. W. (*Knighton*.)  
**P. Pennsylvanica**, L. W. (*Knighton*.)  
**P. Virginiana**, L. W. (*Knighton*.)  
**P. serotina**, Ehrhart. Upland, common.

**Spiræa**, L. (Meadow-Sweet.)

- S. opulifolia**, L. Cultivated about dwellings, rare.  
**S. tomentosa**, L. (Hardhack—Steeple-Bush—Downy Spiræa.) This species is easily distinguished from all others on account of its wrinkled leaves and its pyramid-shaped masses of flowers, with which the summits of its stems and branches are crowned. The last year's fruit-vessels appear among the flowers. Flowers purple, appearing in June, July, and

August. A tea made of the leaves is said to be a remedy for dysentery. In M. and Mer., not common.

**S. salicifolia**, L. (White Spiræa—Meadow-Sweet—Willow-leaved Spiræa.) This species is frequently found growing with the last, though it likes wetter places. Its flowers are white, and the leaves resemble the leaves of willow. Flowers from June to September. Both these species, which grow about three feet high, bear cultivation.

**Gillenia**, Mœnch. (Indian Physic.)

**G. trifoliata**, Mœnch. W. (*Knighton.*)

**Poterium**, L. (Burnet.)

**P. Canadense**, Gray. Freehold, and about Hightstown, Mer., not common.

**Agrimonia**, Tourn. (Agrimony.)

**A. Eupatoria**, L. Borders of woods, rare in the middle counties; common in W. (*Knighton.*)

**Geum**, L. (Avens.)

**G. Virginianum**, L. Freehold, M.

**G. strictum**, Ait. Damp, shady places and meadows, not common.

**Waldsteinia**, Willd.

**W. fragarioides**, Tratt. W. (*Knighton.*)

**Potentilla**, L. (Cinque-foil—Five-finger.)

**P. Norvegica**, L. Cultivated fields, not common in the middle counties; frequent in W. (*Knighton.*)

**P. Canadensis**, L. (Cinque-foil—Five-Finger—False Strawberry.) This little plant always attracts the attention of young botanists. It varies very much in form, so that beginners usually make several species of it during the season. It resembles the field strawberry in general appearance. When found in dry, barren fields, it is small, simple, and thickly sprinkled with silky hairs; when growing in damp, rich fence-rows it is less hairy, and sends off many runners, rooting and flowering along the runners. The plant in damp, rich soil forms the *Var. P. simplex*.

**P. argentea**, L. W. (*Knighton.*)

**P. Anserina**, L. Freehold, M., not common.

**P. fruticosa**, L. Freehold, M., damp places, not common.

**P. palustris**, Scop. Budd's Lake, M. (*Porter.*)

**Fragaria**, Tourn. (Strawberry.)

**F. Virginiana**, Ehrhart. Fields and open woods, common.

**F. vesca**, L. Fields and woods, not common.



**Rubus**, Tourn. (Purple-flowering Raspberry.)**R. odoratus**, L. Hills near Princeton.**R. triflorus**, Richardson. M. (*Dr. Torrey.*)**R. strigosus**, Michx. W. (*Knighton.*)**R. occidentalis**, L. Freehold, M., common in wood-sides and pastures.**R. villosus**, Ait. Borders of thickets, fields, etc., common.**R. Canadensis**, L. Sandy fields, very troublesome, common.**R. hispidus**, L. Low woods, common.**R. cuneifolius**, Pursh. Sandy fields, common.**R. trivialis**, Michx. W. (*Knighton.*)**Rosa**, Tourn. (Rose.)**R. Carolina**, L. Swamps and low grounds, common.**R. lucida**, Ehrhart. Dry, soils and neglected fields, common.**R. blanda**, Ait. Damp meadows, Freehold, not common.**R. rubiginosa**, L. Thickets and road-sides, common.**Cratægus**, L. (Hawthorn—White Tree.)**C. Oxycantha**, L. W. (*Knighton.*)**C. coccinea**, L. Thickets and old fields, not rare.**C. tomentosa**, L. W. (*Knighton.*)**C. punctata**, Jacq. W. (*Knighton.*)**C. Crus-galli**, L. Thickets, not rare.**C. parvifolia**, Ait. Pine barrens, O., common.**Pyrus**, L. (Pear—Apple.)**P. coronaria**, L. M., not common.**P. arbutifolia**, L. Borders of swamps, not rare.*Var. melanocarpa*, Gray. Damp thickets, common.**P. Americana**, DC. Budd's Lake, Mor. (*Porter.*)**Amelanchier**, Medic. (June-berry.)

**A. Canadensis**, Torr. and Gray. (Shad-bush.) This is a very early flower in these borders, and forms a striking object early in April, as it appears in full flower before the surrounding trees have put on their leaves. The tree most common in this part of the State is the *Var. Botryapium*, which is a second-class tree. The other varieties are shrubs.

*Var. Botryapium*. Common.*Var. oblongifolia*. Camden. (*Canby.*)ORDER 35. **SAXIFRAGACEÆ**. SAXIFRAGE FAMILY.**Ribes**, L. (Currant—Gooseberry.)**R. Cynosbati**, L. W. (*Knighton.*)**R. rotundifolium**, Michx. W. (*Knighton.*)

- R. floridum**, L. Princeton. (*Dr. Torrey.*) W. (*Knighton.*)  
**R. rubrum**, L. W. (*Knighton.*)  
**R. aureum**, Pursh. W. (*Knighton.*)

**Itea**, L. (*Itea.*)

- I. Virginica**, L. Swamps, near Manchester, O., not rare.

**Parnassia**, Tourn. (*Grass of Parnassus.*)

- P. Caroliniana**, Michx. Marl banks, New Egypt, O., rare.

**Saxifraga**, L. (*Saxifrage.*)

- S. Virginiensis**, Michx. Dry banks; rare in the middle counties; but Dr. Knighton reports it common on the lime formations of W.  
**S. Pennsylvanica**, L. Freehold, damp woods, not common.

**Heuchera**, L. (*Alum-root.*)

- H. Americana**, L. Shady banks, O., rare.

**Mitella**, Tourn. (*Mitre-wort—Bishop's-Cap.*)

- M. diphylla**, L. Borders of woods near Freehold, M.

**Chrysosplenium**, Tourn. (*Golden Saxifrage.*)

- C. Americanum**, Schweinitz. Cool, damp places, rare.

ORDER 36. **CRASSULACEÆ.** ORPINE FAMILY.

**Penthorum**, Gronovius. (*Dutch Stone-crop.*)

- P. sedoides**, L. Near New Egypt, O., M., and Mer. W. (*Knighton.*)

**Sedum**, Tourn. (*Stone-crop—Orpine.*)

- S. Telephium**, L. Near dwellings, not rare.

ORDER 37. **HAMAMELACEÆ.** WITCH-HAZEL FAMILY.

**Hamamelis**, L. (*Witch-hazel.*)

- H. Virginica**, L. Swamps and damp woods, not rare.

**Liquidambar**, L. (*Sweet-Gum Tree.*)

**L. Styraciflua**, L. (*Sweet-Gum—Bilsted.*) This tree demands a passing notice. Its bark presents a most remarkable roughness. Its leaves are large, glossy, and deeply lobed. It bears cultivation and is a most beautiful object in the lawn. In autumn it puts on a variety of shades, in which deep crimson predominates. In swamps and damp soil, common.

ORDER 38. **HALORAGACEÆ.** WATER-MILFOIL FAMILY.**Myriophyllum**, Vaill. (Water-Milfoil.)**M. scabratum**, Michx. Quiet water, M., near Freehold, and Cape May. (*Canby*.)**M. ambiguum**, Nutt. In water, M., rare.**Proserpinaca**, L. (Mermaid-weed.)**P. palustris**, L. Camden. (*Canby*.)**P. pectinacæ**, Lam. Sandy swamps, Manchester, O., common.ORDER 39. **ONAGRACEÆ.** EVENING-PRIMROSE FAMILY.**Circæa**, Tourn. (Enchanter's Nightshade.)**C. Lutetiana**, L. Damp places in copses, and borders of damp meadows, common.**Epilobium**, L. (Willow-herb.)**E. angustifolium**, L. (Great Willow-herb.) Not common.**E. palustre**, L. Damp places about deserted dwellings, M.**E. coloratum**, Muhl. Wet places, common.**Oenothera**, L. (Evening Primrose.)**O. biennis**, L. Dry fields, very common.**O. sinuata**, L. Old fields, M.**O. fruticosa**, L. Open fields, not common.**O. linearis**, Michx. Camden. (*Canby*.)**O. chrysantha**, Michx. Mer. (*Dr. Torrey*.)**O. pumila**, L. M. (*Dr. Torrey*.)**Ludwigia**, L. (False Loose-strife.)**L. alternifolia**, L. Swamps and damp places, common.**L. hirtella**, Raff. Damp places among the pine forests of O. and M.**L. sphærocarpa**, Ell. Wet places in M., near Freehold.**L. linearis**, Walt. Wet places, Freehold, M.**L. palustris**, Ell. Ditches, common.ORDER 40. **MELASTOMACEÆ.** MELASTOMA FAMILY.**Rhexia**, L. (Deer-Grass—Meadow-Beauty.)**R. Virginica**, L. Sandy swamps, common.**R. Mariana**, L. Sandy swamps, O., rare.ORDER 41. **LYTHRACEÆ.** LOOSESTRIFE FAMILY.**Lythrum**, L. (Loose-strife.)**L. lineare**, L. Borders of salt marshes in M., O., and Md.

**Nesaea**, Commerson, Juss. (Swamp Loose-strife.)

**N. verticillata**, H. B. K. Low swamps, common.

ORDER 43. **CACTACEÆ**. CACTUS FAMILY.

**Opuntia**, Tourn. (Prickly Pear—Indian Fig.)

**O. vulgaris**, Mill. Sandy fields, Point Pleasant, Toms River, O. Also in M., southeastern part.

**O. Rafinesquii**, Engelm. Dr. Porter, of Lafayette College, writes me that he thinks the *Opuntia* of New Jersey is not *vulgaris*, and doubts that *O. vulgaris* is found so far north. Dr. Engelman writes me that specimens that he has seen from New Jersey are *Rafinesquii*. Dr. Gray writes that he does not doubt that *vulgaris* may be found in New Jersey. Dr. Torrey puts it down both in New Jersey and New York. Dr. Lockwood furnished me with specimens from the vicinity of Matawan, which I have growing, and which I am sure are *Rafinesquii*.

ORDER 45. **CUCURBITACEÆ**. GOURD FAMILY.

**Sicyos**, L. (One-seeded Star-Cucumber.)

**S. angulatus**, L. Waste shady places, not common.

**Melothria**, L. (*Melothria*.)

**M. pendula**, L. W. (*Knighton*.)

ORDER 46. **UMBELLIFERÆ**. PARSLEY FAMILY.

**Hydrocotyle**, Tourn. (Water Pennywort.)

**H. Americana**, L. Banks of Shark River, M., rare.

**H. umbellata**, L. Point Pleasant, O., rare.

*Var. ambigua*. Cape May. (*Canby*.)

**H. interrupta**, Muhl. Cape May. (*Canby*.)

**Sanicula**, Tourn. (Sanicle—Black Snakeroot.)

**S. Canadensis**, L. Damp, rich woods, Princeton and Hightstown, Mer., Freehold, M., and near New Brunswick, Mid.

**S. Marilandica**, L. Meadow woods near Squan, not common.

**Eryngium**, Tourn. (*Eryngo*.)

**E. Virginianum**, Lam. Toms River, O., Squan Village, rare.

**Daucus**, Tourn. (Carrot.)

**D. carota**, L. Cultivated fields, too common.

**Heracleum**, L. (Cow-Parsnip.)

**H. lanatum**, Michx. About Freehold, not common.

**Pastinaca**, Tourn. (Parsnip.)

**P. sativa**, L. Fields, near dwellings, too common.

**Archemora**, DC. (Cowbane.)

**A. rigida**, DC. Sandy swamps, common.

**Archangelica**, Hoffm. (Archangelica.)

**A. hirsuta**, Torr. and Gray. Dry, open woods, not rare.

**A. atropurpurea**, Hoffm. Damp woods about Freehold.

**Thaspium**, Nutt. (Meadow-Parsnip.)

**T. barbinode**, Nutt. Shady banks, Prospertown, O., about Princet-  
ton, Mer., rare.

**T. aureum**, Nutt. Copses and shady banks, near Princeton, rare.

**Zizia**, DC.

**Z. integerrima**, DC. Shady banks and open woods, rare.

**Z. cordata**, Koch. W. (*Knighton*.)

**Bupleurium**, Tourn. (Thorough-wax.)

**B. rotundifolium**, L. Mer. (*Dr. Torrey*.)

**Discopleura**, DC. (Mock Bishop-weed.)

**D. capillacea**, DC. Near salt water, not rare.

**Cicuta**, L. (Water-Hemlock.)

**C. maculata**, L. Damp meadows and banks of brooks.

**C. bulbifera**, L. Wet places about Freehold, M., and Hightstown,  
Mer.

**Sium**, L. (Water-Parsnip.)

**S. lineare**, Michx. M. (*Dr. Torrey*.)

**S. latifolium**, L. Freehold, wet places.

**Cryptotænia**, DC. (Hone-wort.)

**C. Canadensis**, DC. Borders of swamps about Freehold.

**Osmorrhiza**, Raf. (Sweet Cicely.)

**O. brevistylis**, DC. Rich woods, Middletown, M., rare.

**Conium**, L. (Poison Hemlock.)

**C. maculatum**, L. Mer. (*Dr. Torrey*.)

ORDER 47. **ARALIACEÆ.** GINSENG FAMILY.**Aralia**, Tourn. (Ginseng—Wild Sarsaparilla.)

- A. spinosa**, L. Cultivated for ornament.
- A. racemosa**, L. Cultivated in gardens, not wild here.
- A. hispida**, Michx. Sandy pine barrens, rather rare.
- A. nudicaulis**, L. Shady thickets, not rare.
- A. trifolia**, Gray. Woods near Freehold, M., rare.

**Panax**, L.

- P. trifolium**, L. Woods, Hightstown, Freehold.

ORDER 48. **CORNACEÆ.** DOGWOOD FAMILY.**Cornus**, Tourn. (Cornel—Dogwood.)

- C. Canadensis**, L. Camden. (*Canby*.)
- C. florida**, L. This, with all the species growing in the State, are beautiful plants and bear transplanting well. Copses and open woods, not rare.
- C. circinata**, L'Her. Thickets, Mer. and M.
- C. sericea**, L. Fence-rows and thickets.
- C. stolonifera**, Michx. Wet banks of streams, common.
- C. paniculata**, L'Her. Along fence-rows about Freehold.
- C. alternifolia**, L. Fence-rows and thickets. Freehold and Hightstown.

**Nyssa**, L. (Tupelo—Pepperidge—Sour-Gum Tree.)

- N. multiflora**, Wang. Damp soil, common.

ORDER 49. **CAPRIFOLIACEÆ.** HONEYSUCKLE FAMILY.**Symphoricarpos**, Dill. (Snowberry.)

- S. racemosus**, Michx. About Freehold.
- S. vulgaris**, Michx. (*Dr. Torrey*.)

**Lonicera**, L. (Honeysuckle—Woodbine.)

- L. sempervirens**, Ait. Mer., near Princeton.
- L. grata**, Ait. W. (*Knighton*.)
- L. ciliata**, Muhl. W. (*Knighton*.)

**Triosteum**, L. (Fever-wort—Horse-Gentian.)

- T. perfoliatum**, L. Borders of woods, rare.

**Sambucus**, Tourn. (Elder.)

- S. Canadensis**, L. Rich soil, common.

**Viburnum**, L. (Arrow-wood—Lauristinus.)

- V. Lentago**, L. (Sheep-berry—Nanny-berry.) All the species in this

genus make slightly objects for the lawn. Sparingly found throughout the middle counties.

- V. prunifolium*, L. Fence-rows, not rare.
- V. nudum*, L. Sandy swamps, common.
- V. dentatum*, L. Wet places, common.
- V. pubescens*, Pursh. Hills near Princeton.
- V. acerifolium*, L. Sparingly throughout the State in damp woods.

#### ORDER 50. RUBIACEÆ. MADDER FAMILY.

*Galium*, L. (Bedstraw—Cleavers.)

- G. aparine*, L. Near Freehold; damp woods.
- G. asprellum*, Michx. Shady places and damp woods, Freehold.
- G. trifidum*, L. Damp places, common.
- G. triflorum*, Michx. Rich wood-lands, common.
- G. pilosum*, Ait. Dry, open woods, not rare.
- G. circæzans*, Michx. Damp, rich woods, common.
- G. lanceolatum*, Torr. Near Freehold, M., and Hightstown, Mer.
- G. boreale*, L. Princeton, woods, Mer. (*Dr. Torrey.*)

*Diodia*, L. (Button-weed.)

- D. teres*, Walt. Sandy fields and road-sides, common.

*Cephalanthus*, L. (Button-bush.)

- C. occidentalis*, L. Wet banks, common.

*Mitchella*, L. (Partridge-berry.)

- M. repens*, L. Damp woods and road-sides, common.

*Oldenlandia*, Plumier, L. (*Oldenlandia.*)

- O. glomerata*, Michx. Near Shark River, M., rare. (*Knieskern.*)

*Houstonia*, L. (*Houstonia.*)

- H. cærulea*, L. Camden. (*Canby.*)

#### ORDER 52. DIPSACEÆ. TEASEL FAMILY.

*Dipsacus*, Tourn. (Teasel.)

- D. sylvestris*, Mill. Road-sides, rare in the middle counties, but common in W. (*Knighton.*)

#### ORDER 53. COMPOSITÆ. COMPOSITE FAMILY.

*Vernonia*, Schreb. (Iron-weed.)

- V. noveboracensis*, Willd. Wet meadows, common.
- Var. alba*, with white flowers, near Freehold, M.

*Sclerolepis*, Cas. (*Sclerolepis.*)

- S. verticillata*, Cass. Pines. (*Canby.*)

**Liatris**, Schreb. (Button Snakeroot—Blazing-Star.)**L. squarrosa**, Willd. W. (*Knighton*.)**L. spicata**, Willd. Salt meadows, near Squan, M., Point Pleasant, O., rare.**L. graminifolia**, Willd. Near Keyport, M.**Var. dubia**, Gray. Damp pine barrens, O., not rare.**Kuhnia**, L. (*Kuhnia*.)**L. eupatorioides**, L. Camden. (*Canby*.)**Eupatorium**, Tourn. (Thoroughwort.)**E. purpureum**, L. Low grounds, common.**E. hyssopifolium**, L. Damp thickets about Freehold.**E. leucolepis**, Torr. and Gray. Swampy places, and wet meadows near Freehold.**E. album**, L. Dry and sandy fields, not rare.**E. teucrifolium**, Willd. Low grounds, common.**E. rotundifolium**, L. Dry soil, common.**E. pubescens**, Muhl. Borders of salt meadows near Manasquan, M.**E. sessilifolium**, L. About Freehold, edges of damp places.**E. resinsum**, Torr. Damp pine barrens, near Manchester, O., and about Freehold, M., rare.**E. perfoliatum**, L. Low grounds, common.**E. ageratoides**, L. Damp wood borders, Freehold, rare.**E. aromaticum**, L. Near Squan Village, M., and about Freehold, rare.**Mikania**, Willd. (Climbing Hemp-weed.)**M. scandens**, L. Shady copses, wet places.**Conoclinium**, DC. (Mist-flower.)**C. celestinum**, DC. Rich soil, not common.**Nardosmia**, Cass. (Sweet Coltsfoot.)**N. palmata**, Hook. W. (*Knighton*.)**Tussilago**, Tourn. (Coltsfoot.)**T. Farfara**, L. Wet places, rare.**Sericocarpus**, Nees. (White-topped Aster.)**S. solidagineus**, Nees. Dry thickets, not rare.**S. conyzoides**, Nees. Dry sandy places, common.**Aster**, L. (Starwort—Aster.)**A. corymbosus**, Ait. Common in damp woods in M., near Freehold and Colts Neck.**A. macrophyllus**, L. Colts Neck, M., not common.



- A. Radula*, Ait. Damp copses, Mer. and M.
- A. surculosus*, Michx. M., not common.
- A. spectabilis*, Ait. Sandy soil, not rare.
- A. concolor*, L. Sandy places, common.
- A. patens*, Ait. Dry soil, common.
- A. lævis*, L. Woods about Freehold, M.
- A. undulatus*, L. Along fences about Freehold, M.
- A. cordifolius*, L. Woods, common.
- A. sagittifolius*, Willd. Princeton, rare.
- A. multiflorus*, Ait. Road-sides and fields, common.
- A. dumosus*, L. Dry woods, common.
- A. Tradescanti*, L. Woods and along fences, common.
- A. miser*, L. Along fence rows about Freehold.
- A. simplex*, Willd. W. (*Knighton*.)
- A. longifolius*, Lam. Freehold, common.
- A. puniceus*, L. Freehold, common.
- A. Novæ-Angliæ*, L. Along fences and borders of meadows, Freehold.
- A. nemoralis*, Ait. Bogs, in barrens, not rare.
- A. flexuosus*, Nutt. Salt marshes, common.
- A. linifolius*, L. Woods, Mer. and M.

**Erigeron**, L. (Fleabane.)

- E. Canadense*, L. Waste places, common.
- E. bellidifolium*, Muhl. Dry woods and along fences, not rare.
- E. Philadelphicum*, L. Rare.
- E. annuum*, Pers. Sparingly in Mer., in pastures.
- E. strigosus*, Muhl. Fields and waste places, common.

**Diplopappus**, Cass. (Double-bristled Aster.)

- D. linariifolius*, Hooker. Dry soils, common.
- D. umbellatus*, Torr. and Gray. Borders of woods, not rare.
- D. amygdalinus*, Torr. and Gray. Low grounds, not rare.
- D. cornifolius*, Darl. Dry woods, common.

**Solidago**, L. (Golden-rod.)

- S. squarrosa*, Muhl. Dry wood-sides, Freehold.
- S. bicolor*, L. Dry, sandy, open woods, common.
- S. latifolia*, L. Near the coast, edges of salt meadows, Mid. and M.
- S. cæsia*, L. Damp, shady woods, Freehold and Princeton.
- S. virgata*, Michx. Damp pine barrens, O., common.
- S. puberula*, Nutt. Pines. (*Canby*.)
- S. stricta*, Ait. W. (*Knighton*.)
- S. speciosa*, Nutt. Borders of woods and along fences, not rare.
- S. rigida*, L. W. (*Knighton*.)
- S. sempervirens*, L. Salt marshes, quite common.

- S. patula*, Muhl. Low grounds, Freehold.
- S. arguta*, Ait. W. (*Knighton*.)
- S. linoides*, Solander. Bogs, not common.
- S. altissima*, L. Along fences and borders of woods.
- S. ulmifolia*, Muhl. Low places, common.
- S. pilosa*, Walt. Wet places in pine and oak woods, M. and O.
- S. odora*, Ait. Dry, sandy woods and road-sides, very common.
- S. nemoralis*, Ait. Dry fields, common.
- S. Canadensis*, L. Borders of thickets and woods, common.
- S. serotina*, Ait. Thickets and low grounds, common.
- S. gigantea*, Ait. Borders of woods, Freehold.
- S. lanceolata*, L. Borders of meadows and pastures, Freehold.
- S. tenuifolia*, Pursh. Common.

**Bigelovia**, DC. (Rayless Golden-rod.)

- B. nudata*, DC. Pine woods near Blue Ball, M.

**Chrysopsis**, Nutt. (Golden Aster.)

- C. falcata*, Ell. Near Toms River, in dry, sandy soil, rare. (*Knieskern*.) Quaker Bridge. (*Canby*.)
- C. Mariana*, Nutt. Dry, sandy or gravelly soil, common.

**Inula**, L. (Elecampane.)

- I. Helenium*, L. Road-sides, rare in middle counties. Common in the north. (*Knighton*.)

**Pluchea**, Cass. (Marsh-Fleabane.)

- P. camphorata*, DC. Salt marshes, common.

**Baccharis**, L. (Groundsel-Tree.)

- B. halimifolia*, L. Not far from the sea, common.

**Silphium**, L. (Rosin-Plant.)

- S. perfoliatum*, L.

**Iva**, L. (Marsh Elder—Highwater-shrub.)

- I. frutescens*, L. Edges of salt marshes, Mid., M., and O.

**Ambrosia**, Tourn. (Ragweed.)

- A. trifida*, L. Rich, damp soil, rare.
- A. artemisiæfolia*, L. Fields, common everywhere.

**Xanthium**, Tourn. (Cocklebur—Clotbur.)

- X. strumarium*, L. Near dwellings, not rare.
- Var. echinatum*, Gray. Near sea-coast, not rare.
- X. spinosum*, L. Keyport, M.

**Heliopsis**, Pers. (Ox-eye.)

**H. lævis**, Pers. Banks and copses, common.

**Rudbeckia**, L. (Cone-flower.)

**R. laciniata**, L. Thickets and along fences, not common.

**R. hirta**, L. Dry fields, not frequent in the middle counties, but common in W. (*Knighton*.)

**Helianthus**, L. (Sunflower.)

**H. angustifolius**, L. Low grounds, near the coast, common.

**H. giganteus**, L. Low grounds, common.

**H. strumosus**, L. Along streams, not rare.

**H. divaricatus**, L. Thickets and barrens, not rare.

**H. decapetalus**, L. Borders of damp woods, rare.

**H. multiflorus**, L. W. (*Knighton*.)

**H. tuberosus**, L. Near ruins of dwellings, not rare.

**Actinomeris**, Nutt. (*Actinomeris*.)

**A. squarrosa**, Nutt. Paterson. (*J. C. Hornblower*.)

**Coreopsis**, L. (Tickseed.)

**C. rosea**, Nutt. Near Hightstown, Mer., wet places.

**C. trichosperma**, Michx. Wet places, common.

**C. discoidea**, Torr. and Gray. Camden. (*Canby*.)

**Bidens**, L. (Bur-Marigold.)

**B. frondosa**, L. Waste places, common.

**B. connata**, Muhl. Wet soil, common.

**B. cernua**, L. Damp, cultivated grounds, near Freehold.

**B. chrysanthemoides**, Michx. Wet places and swamps, common.

**B. bipinnata**, L. Common.

**Helenium**, L. (Sneeze-weed.)

**H. autumnale**, L. Along the high banks of brooks and in the edges of damp meadows.

**Maruta**, Cass. (May-weed.)

**M. Cotula**, DC. Road-sides, very common.

**Anthemis**, L. (Chamomile.)

**A. arvensis**, L. Fields, not rare.

**Achillea**, L. (Yarrow.)

**A. Millefolium**, L. Fields and road-sides, common.

**Leucanthemum**, Tourn. (Ox-eye Daisy.)

**L. vulgare**, Lam. Fields and meadows, common.

**Tanacetum**, L. (Tansy.)

**T. vulgare**, L. Near dwellings, cultivated.

**Artemisia**, L. (Wormwood.)

**A. caudata**, Michx. Sandy soils near the coast, common.

**Gnaphalium**, L. (Cudweed.)

**G. polycephalum**, Michx. Very common.

**G. uliginosum**, L. Ditches and road-sides, common.

**G. purpureum**, L. Sandy soils, not rare.

**Antennaria**, Gærtin. (Everlasting.)

**A. margaritacea**, R. Br. Dry places near the coast, rare. W. (Knighton.)

**A. plantaginifolia**, Hooker. Sterile soil and banks, common. W. (Knighton.)

**Filago**, Tourn. (Cotton-Rose.)

**F. Germanica**, L. Dry, barren fields, rare.

**Erechthites**, Raf. (Fireweed.)

**E. hieracifolia**, Raf. Waste places, recently burned grounds, common.

**Cacalia**, L. (Indian Plantain.)

**C. suaveolens**, L. Rich fence-rows, Freehold.

**C. atriplicifolia**, L. Near Freehold.

**Senecio**, L. (Groundsel.)

**S. vulgaris**, L. W. (Knighton.)

**S. aureus**, L. Common about Freehold.

**Centaurea**, L. (Star-Thistle.)

**C. Calcitrapa**, L. Camden. (Canby.)

**Cirsium**, Tourn. (Common or Plumed Thistle.)

**C. lanceolatum**, Scop. Fields and road-sides, common.

**C. discolor**, Spreng. Borders of thickets, Freehold.

**C. altissimum**, Spreng. Fields and copses, common.

**C. Virginianum**, Michx. Open grounds, M.

**C. muticum**, Michx. Damp places, Princeton.

**C. pumilum**, Spreng. Old fields, common.

**C. horridulum**, Michx. Meadows, both salt and fresh, not rare.

**C. arvense**, Scop. (Canada thistle.) I have never seen this vile weed in any place in the State except in the Presbyterian churchyard, Freehold. Dr. Knighton reports it too prevalent in W.

**Onopordon**, Vaill. (Cotton or Scotch Thistle.)

*O. acanthium*, L. W. (*Knighton*.)

**Lappa**, Tourn. (Burdock.)

*L. major*, Gaert. Rich soil and waste places, common.

**Cichorium**, Tourn. (Succory or Chicory.)

*C. intybus*, L. Waste places and road-sides, rare.

**Krigia**, Schreber. (Dwarf Dandelion.)

*K. Virginica*, Willd. Dry waste places, common.

**Cynthia**, Don. (Cynthia.)

*C. Virginica*, Don. Moist banks, rather rare.

**Leontodon**, L., Juss. (Hawbit—Fall Dandelion.)

*L. autumnale*, L. Freehold.

**Hieracium**, Tourn. (Hawkweed.)

*H. Canadense*, Michx. Mor. (*Porter*.)

*H. scabrum*, Michx. Dry, open woods, near the pines of M.

*H. Gronovii*, L. Dry, open woods, Freehold.

*H. venosum*, L. Dry woods, common.

*H. paniculatum*, L. Open woods, common.

**Nabalus**, Cass. (Rattlesnake-root.)

*N. albus*, Hook. Thickets and borders of woods.

*N. altissimus*, Hook. Near Blue Ball, M., not common.

*N. Fraseri*, DC. Pines. (*Canby*.)

*N. virgatus*, DC. Sparingly scattered throughout the State; it has the reputation of curing the bite of the rattlesnake. Pines. (*Canby*.)

**Taraxacum**, Haller. (Dandelion.)

*T. Dens-leonis*, Desf. Road-sides and lawns, common.

**Lactuca**, Tourn. (Lettuce.)

*L. elongata*, Muhl. Rich soil, not rare.

**Mulgedium**, Cass. (False or Blue Lettuce.)

*M. Floridanum*, DC. Common in M.

*M. leucophæum*, DC. Wet grounds, common.

**Sonchus**, L. (Sow-Thistle.)

*S. oleraceus*, L. Waste places, common.

*S. arvensis*, L. Fields, not common.

ORDER 54. **LOBELIACEÆ.** LOBELIA FAMILY.**Lobelia**, L. (Lobelia.)

- L. cardinalis**, L. Low grounds, common.
- L. syphilitica**, L. About Princeton, Mer., and Crosswicks, Burl., found sparingly in middle counties. Dr. Knighton reports it common in W.
- L. puberula**, Michx. Freehold, Lawrenceville Landing, rare.
- L. inflata**, L. Pasture fields, common. This is the celebrated lobelia of the Thompsonians.
- L. spicata**, Lam. Damp, grassy places, near Hightstown, and W. (*Knighton*.)
- L. Nuttallii**, Rœm. and Sch. Sandy swamps, common.
- L. Canbyi**, n. sp. Batestown. (*Canby*.)

ORDER 55. **CAMPANULACEÆ.** CAMPANULA FAMILY.**Campanula**, Tourn. (Bellflower.)

- C. rotundifolia**, L. A pretty, delicate flower found in damp, grassy places, radical leaves, rotund, but frequently in such a state of decay as not to be found easily. Hightstown, and Princeton, not common.
- C. aparinoides**, Pursh. Bogs and wet meadows, rare.

**Specularia**, Heister. (Venus's Looking-glass.)

- S. perfoliata**, DC. Dry fields, common.

ORDER 56. **ERICACEÆ.** HEATH FAMILY.**Gaylussacia**, H. B. K. (Huckleberry.)

- G. dumosa**, Torr. and Gray. Sandy swamps, not very rare.
- G. frondosa**, Torr. and Gray.
- G. resinosa**, Torr. and Gray. Woods and swamps, common.

**Vaccinium**, L. (Cranberry—Blueberry—Bilberry.)

- V. Oxycoccus**, L. Peat bogs, very common.
- V. macrocarpon**, Ait. Swamps in pines of M.
- V. stamineum**, L. Dry woods, very rare.
- V. Pennsylvanicum**, Lam. Dry hills and woods, common.
- V. vacillans**, Solander. Borders of woods, M.
- V. corymbosum**, L. Swamps, common.
- Var. atrocarpum.*

**Arctostaphylos**, Adans. (Bearberry.)

- A. Uva-ursi**, Spreng. Pine barrens, common, O.

**Epigæa**, L. (Ground Laurel—Trailing Arbutus.)

- E. repens**, L. Sandy woods, common from the middle of the State northward.

**Gaultheria**, Kalm. (Aromatic Wintergreen.)

**G. procumbens**, L. Dry and damp woods, common.

**Leucothœ**, Don. (Leucothœ.)

**L. racemosa**, Gray. Swamps, common.

**Cassandra**, Don. (Leather-Leaf.)

**C. calyculata**, Don. Bogs and swamps, common.

**Andromeda**, L. (Andromeda.)

**A. calyculata**, L. W. (*Knighton*.)

**A. polifolia**, L. Budd's Lake, Mor. (*Porter*.)

**A. Mariana**, L. Sandy places, common.

**A. ligustrina**, Muhl. Swamps, common.

**Clethra**, L. (White Alder—Sweet Pepperbush.)

**C. alnifolia**, L. Swamps and dry, sandy soils, common.

**Kalmia**, L. (American Laurel.)

**K. latifolia**, L. (Mountain Laurel—Calico Bush—Spoon-wood.) This evergreen is one of the most beautiful objects of the forests throughout the middle and northern parts of the State; with care, it may be removed to the lawn. Its showy flowers in June, and its deep green foliage during winter, make it a most desirable object. Woods, common.

The *K. angustifolia* is also an evergreen, but the flowers are inconspicuous, and leaves pale.

**K. angustifolia**, L. Damp places, swamps, common.

**K. glauca**, Ait. Budd's Lake, Mor. (*Porter*.)

**Azalea**, L. (False Honeysuckle—Azalea.)

This genus has two representatives in the State, which are great beauties; and bear transplanting well. The *A. viscosa* is easily distinguished from the *A. nudiflora*, by its *sticky* flowers.

**A. viscosa**, L. Sandy swamps, very common.

**A. nudiflora**, L. Thickets, on hills, common.

**Rhododendron**, L. (Rose-bay.)

**R. maximum**, L. (Great Laurel.) This beautiful shrub only needs to be seen to be appreciated. It grows along the banks of the Delaware, from Bordentown, all along through Mer., and the northern counties, up to Delaware Water Gap. No lawn should be without this object of beauty. In describing it I might say it is like *K. latifolia*, but much more beautiful.

**Leiophyllum**, Pers. (Sand Myrtle.)

**L. buxifolium**, Ell. Sandy, damp barrens, O., not rare.

**Pyrola**, Tourn. (Wintergreen—Shin-leaf.)**P.** rotundifolia, L. Damp or shady woods, common.**P.** elliptica, Nutt. Damp woods, Freehold.**P.** chlorantha, Swartz. W. (*Knighton*.) Pines. (*Canby*.)**P.** secunda, L. Shady, rich woods, Freehold.

All the species of this genus are rare.

**Chimaphila**, Pursh. (Pipsissewa.)**C.** umbellata, Nutt. Dry woods, common.**C.** maculata, Pursh. Dry woods, common with the last.**Monotropa**, L. (Indian Pipe—Pine-sap.)**M.** uniflora, L. Shady woods, common.**M.** Hypopitys, L. Less common than the last, woods.ORDER 58. **AQUIFOLIACEÆ**. HOLLY FAMILY.**Ilex**, L. (Holly.)**I.** opaca, Ait. (American Holly.) This tree is found in M., sparingly. It has a wavy leaf, whose edge is armed with sharp thorns. Flowers inconspicuous, berries red. It bears cultivation well, and is a beautiful object on account of its rich evergreen foliage.**I.** verticillata, Gray. Camden. (*Canby*.)**I.** lævigata, Gray. Pines. (*Canby*.)**I.** glabra, Gray. Southern parts of M. and northern parts of O., near Squankum and Howell-works.**Nemopanthes**, Raf. (Mountain Holly.)**N.** Canadensis, DC. Swamps, O., and Budd's Lake, Mor. (*Porter*.) Pines. (*Canby*.) Rare.ORDER 59. **EBENACEÆ**. EBONY FAMILY.**Diospyros**, L. (Date-Plum—Persimmon.)**D.** Virginiana, L. Borders of woods, common, in middle counties.ORDER 62. **PLANTAGINACEÆ**. PLANTAIN FAMILY.**Plantago**, L. (Plantain—Ribgrass.)**P.** major, L. Near dwellings, common.**P.** maritima, L. Salt marshes, not rare.**P.** lanceolata, L. Fields and pastures, very common.**P.** Virginica, L. Sandy soil, not rare.**P.** pusilla, Nutt. Dry fields and road-sides, not rare.



ORDER 63. **PLUMBAGINACEÆ.** LEADWORT FAMILY.

**Statice**, Tourn. (Sea-Lavender—Marsh-Rosemary.)

**S. Limonium**, L. (Pride of the Salt Meadow.) This beautiful, showy little plant may well be called the pride of the meadow for it is the most beautiful object that adorns the borders of our salt marshes. It grows from one to two feet high, the whole top densely covered with pale bluish flowers. It is remarkable for retaining the color and life-like appearance of the flowers in a dry state; remaining unchanged in appearance for months after collection. It is frequently collected, the stems inserted in dry sand, and kept all winter as a parlor ornament. Salt marshes, not rare.

*Var. Caroliniana*, Walt. Cape May. (*Canby*.)

ORDER 64. **PRIMULACEÆ.** PRIMROSE FAMILY.

**Trientalis**, L. (Chickweed-Wintergreen.)

**T. Americana**, Pursh. Damp shady places, not rare.

**Lysimachia**, Tourn. (Loosestrife.)

**L. thyrsiflora**, L. Freehold, not common.

**L. stricta**, Ait. Low grounds, common.

**L. quadrifolia**, L. Damp places, common.

**L. ciliata**, L. Freehold, low grounds and thickets, common.

**L. lanceolata**, Walt. Common in damp places.

**Anagallis**, Tourn. (Pimpernel.)

**A. arvensis**, L. Waste, sandy fields, not common.

**Samolus**, L. (Water Pimpernel—Brood-weed.)

**S. Valerandi**, L.

*Var. Americanus*, Gray. Salt marshes, not rare.

ORDER 65. **LENTIBULACEÆ.** BLADDER-WORT FAMILY.

**Utricularia**, L. (Bladder-wort.)

**U. inflata**, Walt. Stagnant pools, near Long Branch.

**U. vulgaris**, L. Near Eatontown, M.

**U. clandestina**, Nutt. Freehold.

**U. striata**, LeConte. About Upper Squankum.

**U. purpurea**, Walt. Ponds, floating, not rare.

**U. cornuta**, Michx. Peat bogs, common.

**U. subulata**, L. Sandy swamps, rare.

These species are found sparingly, except *U. cornuta*.

ORDER 66. **BIGNONIACEÆ.** BIGNONIA FAMILY.

**Tecoma**, Juss. (Trumpet-flower.)

**T. radicans**, Juss. Cultivated, not rare.

**Catalpa**, Scop., Walt. (Catalpa—Indian Bean.)

*C. bignonioides*, Walt. Cultivated, common.

**Martynia**, L. (Unicorn-plant.)

*M. proboscidea*, Glox. Escaped from gardens, rare.

ORDER 67. **OROBANCHACEÆ**. BROOM-RAPE FAMILY.

**Epiphegus**, Nutt. (Beech-Drops—Cancer-root.)

*E. Virginiana*, Bart. Freehold, not common.

**Conopholis**, Wallroth. (Squaw-root—Cancer-root.)

*C. Americana*, Wallworth. Near the roots of trees in shady woods. Freehold. Reported common in M. and W. by Dr. Knighton.

**Aphyllon**, Mitchell. (Naked Broom-rape.)

*A. uniflorum*, Torr. and Gray. Thickets or shady woods, rare.

ORDER 68. **SCROPHULARIACEÆ**. FIG-WORT FAMILY.

**Verbascum**, L. (Mullein.)

*V. Thapsus*, L. Fields and road-sides, common.

*V. Blattaria*, L. Waste places and fields, rather common.

*V. Lychnitis*, L. W. (*Knighton*.)

**Linaria**, Tourn. (Toad-Flax.)

*L. Canadensis*, Spreng. Sandy soils, common.

*L. vulgaris*, Mill. Road-sides, not rare.

**Scrophularia**, Tourn. (Fig-wort.)

*S. nodosa*, L. Along fences, rather rare.

**Chelone**, Tourn. (Turtle-head—Snake-head—Balmoney.)

*C. glabra*, L. Grows in wet places. Flowers pure white, sometimes with a purplish tint. A rather coarse plant, but striking on account of its singular shaped flower. Rather common.

**Pentstemon**, Mitchell. (Beard-tongue—Pentstemon.)

*P. pubescens*, Solander. Princeton and Freehold, rare.

**Mimulus**, L. (Monkey-flower.)

*M. ringens*, L. Wet places, rare.

*M. alatus*, Ait. Low grounds, rare.

**Gratiola**, L. (Hedge Hyssop.)

*G. Virginiana*, L. Wet places, common.

*G. aurea*, Muhl. Shores of mill-ponds, common.

*G. pilosa*, Michx. Camden. (*Canby*.)

**Ilysanthes, Raf.**

**I. gratioloides, Benth.** Wet places, rather rare.

**Veronica, L. (Speedwell.)**

- V. Virginica, L.** Damp grounds, M., not rare.
- V. Anagallis, L.** Hightstown, along streams.
- V. Americana, Schro.** New Egypt, O., rare.
- V. scutellata, L.** Damp grounds, Hightstown.
- V. officinalis, L.** Road-sides, common.
- V. serpyllifolia, L.** Fields and road-sides, not rare.
- V. peregrina, L.** Borders of fields, common.
- V. arvensis, L.** Cultivated fields, rather common.
- V. spicata, L.** Escaped from gardens, W. (*Knighton.*)

**Gerardia, L. (Gerardia—False Foxglove.)**

This genus has some very interesting members; among the most striking species are the *G. purpurea*, whose delicate, showy, purple flowers are very pretty; the *G. flava* and *G. quercifolia*, have large, showy, yellow flowers, turning black when pressed.

- G. purpurea, L.** Damp places, common.
- G. maritima, Raf.** Salt marshes, not rare.
- G. tenuifolia, Vahl.** Dry soils, common.
- G. flava, L.** Woods, Princeton, Freehold, Hightstown, common.
- G. quercifolia, Pursh.** Dry woods, common.
- G. pedicularia, L.** Dry, shady places, sandy plains, common.

**Castilleja, Mutis. (Painted-Cup.)**

**C. coccinea, Spreng.** Found sparingly in M. and Mer.

**Schwalbea, Gronov. (Chaff-seed.)**

**S. Americana, Tourn.** Pines. (*James.*)

**Pedicularis, Tourn. (Louse-wort.)**

- P. Canadensis, L.** Banks and copses, common.
- P. lanceolata, Michx.** Damp ground about Freehold, not common.

**Melampyrum, Tourn. (Cow-Wheat.)**

**M. Americanum, Michx.** Open and shady woods, common.

ORDER 70. **VERBENACEÆ.** VERVAIN FAMILY.**Verbena, L. (Vervain.)**

- V. angustifolia, Michx.** Dry soil, rare.
- V. hastata, L.** Damp soils, common.
- V. urticifolia, L.** Road-sides and waste places, common.
- V. officinalis, L.** Fields, waste places, very rare.
- V. melindres, Lind.** Escaped from gardens, W. (*Knighton.*)

**Phryma**, L. (Lopseed.)

**P.** *Leptostachya*, L. Rich copses, not rare.

ORDER 71. **LABIATÆ.** MINT FAMILY.**Teucrium**, L. (Germander.)

**T.** *Canadense*, L. Low grounds, rather rare.

**Trichostema**, L. (Blue Curls.)

**T.** *dichotomum*, L. Camden. (*Canby*.)

**T.** *lineare*, Nutt. Sandy fields and barrens, not rare.

**Isanthus**, Michx. (False Pennyroyal.)

**I.** *cæruleus*, Michx. Freehold, not rare.

**Mentha**, L. (Mint.)

**M.** *rotundifolia*, L. Hunterdon, on the Delaware. (*Porter*.)

**M.** *viridis*, L. Wet meadows, common.

**M.** *piperita*, L. Brooks and low grounds, common.

**M.** *Canadensis*, L. Damp places, road-sides, not common.

**Lycopus**, L. (Water Horehound.)

**L.** *Virginicus*, L. Moist, shady places, common.

**L.** *Europæus*, L. Damp, shady places, common.

*Var.* *sessilifolius*, Gray. Toms River, O. (*Porter*.) Atsion. (*Canby*.)

*Var.* *sinuatus*, Gray. M., not common.

**Cunila**, L. (Dittany.)

**C.** *Mariana*, L. Common.

**Pycnanthemum**, Michx. (Mountain Mint—Basil.)

**P.** *aristatum*, Michx. Pine barrens, not rare, O.

**P.** *incanum*, Michx. Along fences and in rocky places, Princeton and Paterson, not common.

**P.** *Torreyi*, Benth. Dry hedge-rows and along fences about Freehold.

**P.** *lanceolatum*, Pursh. Along fences and the borders of cultivated fields, rather common. Freehold, Paterson.

**P.** *linifolium*, Pursh. Found growing with the last.

**Origanum**, L. (Wild Marjoram.)

**O.** *vulgare*, L. W. (*Knighton*.)

**Thymus**, L. (Thyme.)

**T.** *serpyllifolium*, L. W. (*Knighton*.)

**Calamintha**, Mœnch. (Calaminth.)**C.** *clinopodium*, Benth. Open thickets, rather rare.**Melissa**, L. (Balm.)**M.** *officinalis*, L. Near dwellings, strayed from gardens. About Hightstown.**Hedeoma**, Pers. (Mock Pennyroyal.)**H.** *pulegioides*, Pers. Road-sides, common.**Collinsonia**, L. (Horse-Balm.)**C.** *Canadensis*, L. Rich, open woods, common.**Salvia**, L. (Sage.)**S.** *lyrata*, L. Open woods and fields, common.**Monarda**, L. (Horse Mint.)**M.** *didyma*, L. Damp, open woods, not common.**M.** *punctata*, L. (Horse Mint.) Growing in dry, sandy fields in M., near Blue Ball; in Mid., near Spotswood and Old Bridge. Not common.**Blephilia**, Raf. (Blephilia.)**B.** *ciliata*, Raff. W. (*Knighton*.)**Lophanthus**, Benth. (Giant Hyssop.)**L.** *nepetoides*, Benth. Along fences and in the edges of woods, Freehold, not common.-**L.** *scrophulariæfolius*, Benth. Borders of thickets, Freehold.**Nepeta**, L. (Cat Mint.)**N.** *Cataria*, L. Near dwellings, common.**N.** *Glechoma*, Benth. Waste grounds, near dwellings, not rare.**Physostegia**, Benth. (False Dragon-Head.)**P.** *Virginiana*, Benth. Wet banks of streams, rare.**Brunella**, Tourn. (Self-heal.)**B.** *vulgaris*, L. Woods and fields, common.**Scutellaria**, L. (Skullcap.)**S.** *pilosa*, Michx. Freehold and Hightstown, frequent.**S.** *integrifolia*, L. Damp places, common.**S.** *parvula*, Michx. W. (*Knighton*.)**S.** *galeriifolia*, L. W. (*Knighton*.)**S.** *lateriflora*, L. Wet, shady places, rare.

**Marrubium**, L. (Horehound.)**M. vulgare**, L. Waste places, common.**Galeopsis**, L. (Hemp-Nettle.)**G. Tetrahit**, L. W. (*Knighton*.)**G. Ladanum**, L. Near dwellings, rare.**Stachys**, L. (Hedge-Nettle.)**S. palustris**, L. Wet banks, not common.*Var. aspera* (*S. aspera*, Michx.). W. (*Knighton*.)**S. hyssopifolia**, Michx. Camden. (*Canby*.)**Leonurus**, L. (Motherwort.)**L. Cardiaca**, L. Waste places, near dwellings, not rare.**Lamium**, L. (Dead-Nettle.)**L. amplexicaule**, L. Cultivated grounds, rare.ORDER 72. **BORRAGINACEÆ**. BORAGE FAMILY.**Echium**, Tourn. (Viper's Bugloss.)**E. vulgare**, L. George's Road, near cross-roads, Mid.; also in W. (*Knighton*.)**Symphytum**, Tourn. (Comfrey.)**S. officinale**, L. Road-sides, near dwellings, not rare.**Onosmodium**, Michx. (False Cromwell.)**O. Virginianum**, DC. Near Hightstown, not common.**Lithospermum**, Tourn. (Cromwell—Puccoon.)**L. arvense**, L. Sandy banks, rare.**L. officinale**, L. W. (*Knighton*.)**Myosotis**, L. (Scorpion-grass—Forget-me-not.)**M. palustris**, Withering. Wet places, not rare.*Var. laxa*, Gray. Damp places, Jacksonville, M., not common.**Echinosperrum**, Swartz. (Stickseed.)**E. Lappula**, Lehm. Damp places, Freehold.**Cynoglossum**, Tourn. (Hound's-Tongue.)**C. officinale**, L. W. (*Knighton*.)**C. Virginicum**, L. Damp woods, Freehold, M.**C. Morisoni**, DC. Edges of damp meadows and along brooks, Freehold.

ORDER 73. **HYDROPHYLLACEÆ.** WATERLEAF FAMILY.**Hydrophyllum**, L. (Waterleaf.)**H. Virginicum**, L. Damp woods, near Freehold.**Ellisia**, L. (Ellisia.)**E. Nyctelea**, L. Banks of Delaware, near Trenton. (*Canby*.)**Phacelia**, Juss.**P. Purshii**, Buckley. W. (*Knighton*.)ORDER 74. **POLEMONIACEÆ.** POLEMONIUM FAMILY.**Polemonium**, Tourn. (Greek Valerian.)**P. reptans**, L. Belvidere. (*Knighton*.)**Phlox**, L. (Phlox.)**P. paniculata**, L. Hunterdon. (*Knighton*.)**P. maculata**, L. Near Princeton, Mer., W. (*Porter*.)**P. pilosa**, L. Woodbury, G. (*Canby*.) Borders of woods, not common.**P. subulata**, L. Hunterdon and W. (*Knighton*.)**Pyxidanthera**, Michx. (Pyxidanthera.)**P. barbulata**, Michx. A beautiful plant, common.ORDER 75. **CONVOLVULACEÆ.** CONVOLVULUS FAMILY.**Ipomœa**, L. (Morning-Glory.)**I. purpurea**, Lam. Camden. (*Canby*.)**I. pandurata**, Meyer. Sandy fields, Prospertown, O., rare. Reported common in W. by Dr. Knighton.**Convolvulus**, L. (Bindweed.)**C. arvensis**, L. Fields, near the coast, common.**Calystegia**, R. Br. (Bracted Bindweed.)**C. sepium**, R. Br. Near Squan Village, M., not rare.**C. spithamea**, Pursh. Swamps in sandy places; common in M.**Bonamia**, Thouars.**B. Pickeringii**, Gray. Pines. (*Canby*.)**Cuscuta**, Tourn. (Dodder.)**C. Epilinum**, Weihe. Flax fields, not common,**C. tenuiflora**, Engelm. Damp places, common.**C. arvensis**, Beyrich. Cape May. (*Canby*.)

- C. Gronovii**, Willd. Damp meadow borders, not rare.  
**C. compacta**, Juss. Pines. (*Canby*.)  
**C. glomerata**, Choisy. On Compositæ, not rare.

ORDER 76. **SOLANACEÆ**. NIGHTSHADE FAMILY.

**Solanum**, Tourn. (Nightshade.)

- S. Dulcamara**, L. Around dwellings, Princeton and Hightstown.  
**S. nigrum**, L. Cultivated fields near dwellings, not rare.  
**S. Carolinense**, L. Phillipsburg. (*Porter*.)

**Physalis**, L. (Ground Cherry.)

- P. viscosa**, L. Fields and road-sides, not rare.

**Hyoscyamus**, Tourn. (Henbane.)

- H. niger**, L. W. (*Knighton*.)

**Datura**, L. (Jamestown-Weed—Thorn Apple.)

**D. Stramonium**, L. (Jimson-Weed—Simon Pumpkin—Jamestown-weed—Thorn-Apple.) This weed is said to afford relief in asthma. The leaves are cured and smoked like tobacco. It is said to spring up on the top of heaps of earth taken from far below the surface in digging deep wells. Waste places, common.

ORDER 77. **GENTIANACEÆ**. GENTIAN FAMILY.

**Sabbatia**, Adans. (American Centaury.)

- S. lanceolata**, Torr. and Gray. Pine barrens, O., common.  
**S. angularis**, Pursh. Dry grounds, M.  
**S. stellaris**, Pursh. Borders of salt marshes, Mid., M., and O., common.  
**S. chloroides**, Pursh. Salt marshes, not rare.

**Gentiana**, L. (Gentian.)

A very pretty genus; plants growing in damp grounds. **G. crinita** and **G. quinqueflora**, grow sparingly in M. and Mer.

- G. quinqueflora**, Lam. Damp grounds, Freehold and Hightstown.  
**G. crinita**, Frœl. Wet places, Hightstown and Freehold and W. (*Knighton*.)

- G. alba**, Muhl. Hunterdon. (*Knighton*.)  
**G. Andrewsii**, Griseb. Shark River, not rare.  
**G. Saponaria**, L. Shark River, M., Freehold, Mer., Hightstown.  
**G. angustifolia**, Michx. Damp soil, very rare.

**Bartonia**, Muhl.

- B. tenella**, Muhl. Moist, open places, not rare.



**Obolaria**, L. (*Obolaria*.)

**O. Virginica**, L. Near Princeton and about Lawrenceville. A very curious and interesting plant, not common.

**Menyanthes**, Tourn. (Buckbean.)

**M. trifoliata**, L. Budd's Lake, Mor. (*Porter*.)

**Limnanthemum**, Gmelin. (Floating Heart.)

**L. lacunosum**, Grisebach. Ponds, rare.

ORDER 79. **APOCYNACEÆ**. DOGBANE FAMILY.**Apocynum**, Tourn. (Dogbane—Indian Hemp.)

**A. androsæmifolium**, L. Borders of sandy thickets, not rare.

**A. cannabinum**, L. River banks, common.

ORDER 80. **ASCLEPIADACEÆ**. MILKWEED FAMILY.**Asclepias**, L. (Milkweed—Silkweed.)

**A. Cornuti**, Decaisne. Fields and road-sides, rather rare in the middle counties, but Dr. Knighton reports it common in the north.

**A. phytolaccoides**, Pursh. Hunterdon. (*Knighton*.)

**A. purpurascens**, L. Wood-sides, Freehold.

**A. variegata**, L. Near Smithville, rare.

**A. quadrifolia**, Jacq. Sparingly found in Mer. and M.

**A. incarnata**, L. Wet grounds, common.

**A. obtusifolia**, Michx. Sandy woods and fields, not rare.

**A. rubra**, L. About cranberry swamps, M. and O.

**A. pauperula**, Michx. Salt marshes, O., not common.

**A. tuberosa**, L. Dry fields, common.

**A. verticillata**, L. Freehold.

**Acerates**, Ell. (Green Milkweed.)

**A. viridiflora**, Ell. Dry pine woods, M.

ORDER 81. **OLEACEÆ**. OLIVE FAMILY.**Ligustrum**, Tourn. (Privet.)

**L. vulgare**, L. Road-sides, not common.

**Chionanthus**, L. (Fringe-tree.)

**C. Virginica**, L. Camden, in swamps, not common. (*Canby*.)

**Fraxinus**, Tourn. (Ash.)

**F. Americana**, L. Woods near Princeton.

**F. viridis**, Michx. Near streams, not rare.

**F. sambucifolia**, Lam. Woods, Freehold.

ORDER 82. **ARISTOLOCHIACEÆ.** BIRTH-WORT FAMILY.**Asarum**, Tourn. (Asarabacca—Wild Ginger.)**A.** *Canadense*, L. Woods near Freehold.**Aristolochia**, Tourn. (Birth-wort.)**A.** *Serpentaria*, L. Woods near Hightstown.ORDER 84. **PHYTOLACCACEÆ.** POKEWEED FAMILY.**Phytolacca**, Tourn. (Pokeweed.)**P.** *decandra*, L. New ground, common. M. and Mer.ORDER 85. **CHENOPODIACEÆ.** GOOSEFOOT FAMILY.**Chenopodium**, L. (Goosefoot—Pigweed.)**C.** *album*, L. Fields and gardens, very common.**C.** *urbicum*, L. About dwellings, common.**C.** *murale*, L. Near dwellings, common.**C.** *hybridum*, L. Cultivated grounds, common.**C.** *Botrys*, L. Near dwellings, common.**C.** *ambrosioides*, L. Waste places, common.**Var.** *anthelminticum*, Gray. (Wormseed.) Waste places, common.**Blitum**, Tourn. (Blite.)**B.** *maritimum*, Nutt. Salt marshes, rare, O.**Atriplex**, Tourn. (Orache.)**A.** *hastata*, L. Salt marshes, O., not rare.**A.** *arenaria*, Nutt. Cape May. (*Canby*.)**Salicornia**, Tourn. (Glasswort—Samphire.)**S.** *herbacea*, L. Salt marshes, common.**S.** *Virginica*, L. Cape May. (*Canby*.)**S.** *ambigua*, Michx. Salt marshes, less common.**Suaeda**, Forskal. (Sea Blite.)**S.** *maritima*, Dumortier. Salt marshes, not rare. Cape May. (*Canby*.)**Salsola**, L. (Salt-wort.)**S.** *Kali*, L. Sea shore, common.ORDER 86. **AMARANTACEÆ.** AMARANTH FAMILY.**Amarantus**, Tourn. (Amaranth.)**A.** *hypochondriacus*, L. Hunterdon and W. (*Knighon*.)**A.** *retroflexus*, L. Waste places, common.

- A. albus*, L. Road-sides, common.  
*A. spinosus*, L. Waste places and road-sides, rare.

**Acnida**, L. (Water-Hemp.)

- A. cannabina*, L. Salt marshes, not common.

ORDER 87. **POLYGONACEÆ**. BUCKWHEAT FAMILY.

**Polygonum**, L. (Knotweed.)

- P. orientale*, L. Waste places, rare.  
*P. Carey*, Olney. Toms River, O. (*Porter*.) Also, Atlantic. (*Canby*.)  
*P. Pennsylvanicum*, L. Moist waste places, common.  
*P. Persicaria*, L. Waste places, common.  
*P. Hydropiper*, L. Damp waste places, common.  
*P. hydropiperoides*, Michx. Damp meadows and ditch-sides, common.  
*P. amphibium*, L. Common in wet grounds, on the borders of brooks, and in the water, common.  
*P. Virginianum*, L. Low, damp soil, common.  
*P. articulatum*, L. Dry, sandy soil, common.  
*P. aviculare*, L. Everywhere common.  
*Var. erectum* and *littorale*. Common, the last near the coast.  
*P. tenue*, Michx. Hills about Princeton.  
*P. arifolium*, L. Low grounds, common.  
*P. sagittatum*, L. Low grounds, common.  
*P. Convolvulus*, L. Waste places, common.  
*P. cilinode*, Michx. W. (*Knighton*.)  
*P. dumetorum*, L. Thickets, not rare.

**Fagopyrum**, Tourn. (Buckwheat.)

- F. esculentum*, Mœnch. Cultivated fields, waste places.

**Rumex**, L. (Dock—Sorrel.)

- R. verticillatus*, L. Swamps, common.  
*R. crispus*, L. Waste and cultivated grounds, common.  
*R. obtusifolius*, L. Fields, common.  
*R. sanguineus*, L. Near dwellings, common.  
*R. maritimus*, L. Salt marshes, not rare.  
*R. Acetosella*, L. Fields and pastures, too common.

ORDER 88. **LAURACEÆ**. LAUREL FAMILY.

**Sassafras**, Nees. (Sassafras.)

- S. officinale*, Nees. Dry woods, common.

**Lindera**, Thunberg. (Wild Allspice—Fever-bush.)

- L. Benzoin*, Meisner. Swamps and damp woods, rather common.

ORDER 91. **SANTALACEÆ.** SANDALWOOD FAMILY.*Comandra*, Nutt. (Bastard Toad-flax.)*C. umbellata*, Nutt. Sandy, open woods, not rare.ORDER 92. **LORANTHACEÆ.** MISTLETOE FAMILY.*Phoradendron*, Nutt. (False Mistletoe.)*P. flavescens*, Nutt. (Mistletoe.) On the Nyssa, Mer., near Hightstown, not common. I have never seen this plant on pines.ORDER 93. **SAURURACEÆ.** LIZARD'S-TAIL FAMILY.*Saururus*, L. (Lizard's-tail.)*S. cernuus*, L. Borders of ponds and streams, O., abundant along Stony Brook east of Princeton.ORDER 94. **CERATOPHYLLACEÆ.** HORNWORT FAMILY.*Ceratophyllum*, L. (Hornwort.)*C. demersum*, L. In sluggish streams, common.ORDER 95. **CALLITRICHACEÆ.** WATER-STARWORTS.*Callitriche*, L. (Water-Starwort.)*C. verna*, L. Bottoms of dried-up ponds, M.ORDER 96. **PODOSTEMACEÆ.** RIVER-WEED FAMILY.*Podostemon*, Michx. (River-weed.)*P. ceratophyllus*, Michx. Slow brooks, common.ORDER 97. **EUPHORBIACEÆ.** SPURGE FAMILY.*Euphorbia*, L. (Spurge.)*E. polygonifolia*, L. Sandy sea-shore, common. Cape May, (*Canby*.)*E. maculata*, L. Cultivated grounds. A troublesome weed in the potato-fields of M.*E. hypericifolia*, L. Fields and meadows, rather rare.*E. corollata*, L. Sandy soil, common.*E. Ipecacuanhæ*, L. Sandy soils in M. and O. This plant assumes many forms in foliage, and has a large root.*E. Peplus*, L. W. (*Knighton*.)*Acalypha*, L. (Three-seeded Mercury.)*A. Virginica*, L. Fields and open places, common.*Var. gracilens*, Gray. Sandy fields, quite common.*Croton*, L. (Croton.)*C. capitatus*, Michx.

**Crotonopsis**, Michx. (Crotonopsis.)

*C. linearis*, Michx. Near Manchester, O., and Southwark, rare.

ORDER 98. **EMPETRACEÆ**. CROWBERRY FAMILY.**Corema**, Don. (Broom-Crowberry.)

*C. Conradii*, Torr. Borders of pine woods, O. and M.

ORDER 99. **URTICACEÆ**. NETTLE FAMILY.**Umus**, L. (Elm.)

*U. fulva*, Michx. M., Mer., not rare.

*U. Americana*, L. River banks, rather rare.

**Celis**, Tourn. (Nettle-tree—Hackberry.)

*C. occidentalis*, L. Banks of Tom's River, O., rare.

**Mors**, Tourn. (Mulberry.)

*M. rubra*, L. Around dwellings, common.

*M. alba*, L. W. (*Knighton*.)

**Urtic**, Tourn. (Nettle.)

*U. gracilis*, Ait. W. (*Knighton*.)

*U. dioica*, L. W. (*Knighton*.)

**Laportea**, Gaudichaud. (Wood-Nettle.)

*L. Canadensis*, Gaudichaud. Damp woods, M. (*Dr. Torrey*.)

**Pilea**, Indl. (Richweed—Clearweed.)

*P. umila*, Gray. W. (*Knighton*.)

**Boehmeia**, Jacq. (False Nettle.)

*B. cylindrica*, Willd. Mer. (*Dr. Torrey*.)

**Parietaria**, Tourn. (Pellitory.)

*P. pennsylvanica*, Muhl. Mer. (*Dr. Torrey*.)

**Hunulus**, L. (Hop.)

*H. Knieskern* puts this down in his catalogue, hence, I presume, he has seen it growing without cultivation.

ORDER 100. **PLATANACEÆ**. PLANE-TREE FAMILY.**Platanus**, L. (Plane-tree—Buttonwood.)

*P. occidentalis*, L. Banks of streams, common.

ORDER 101. **JUGLANDACEÆ.** WALNUT FAMILY.**Juglans**, L. (Walnut.)

**J. cinerea**, L. Rich soil, banks of streams, rare in M., O., and Bur. Common in the hills near Princeton.

**J. nigra**, L. About dwellings and in fields.

**Carya**, Nutt. (Hickory.)

**C. alba**, Nutt. Large tree, along fence-rows, Princeton. Not very common.

**C. sulcata**, Nutt. In open woods, Freehold, not common.

**C. tomentosa**, Nutt. Rich woods, the common hickory.

**C. porcina**, Nutt. Woods, Mer. and Mid., frequent.

**C. amara**, Nutt. Woods, common.

ORDER 102. **CUPULIFERÆ.** OAK FAMILY.**Quercus**, L. (Oak.)

**Q. alba** L. Rich soil, very common and valuable.

**Q. obtusiloba**, Michx. Sandy soil, common.

**Q. bicolor**, Willd. Hunterdon. (*Knighton*.)

**Q. prinus**, L.

*Var. monticola*, Michx. Hilly woods, common.

*Var. acuminata*, Michx. Mer. and M.

*Var. humilis*, Marsh. Camden, pine woods. (*Canby*.)

**Q. phellos**, L. (Willow Oak.) This tree is found in Mer., Mid., and M., sparingly. I think this is the northern limit of it. Dr. Torre puts it down in the New York flora as growing in Suffolk County, I. I. I have not seen any on the island and think if it was seen there must have been in planted grounds.

Since the above was written Miller and Young's catalogue has been published, and reports *Q. phellos* growing in Suffolk County, N. Y.

**Q. imbricaria**, Michx. Woods, Mer. and Mid.

**Q. nigra**, L. Dry, sandy soil, common.

**Q. ilicifolia**, Wang. Pine barrens, common.

**Q. falcata**, Michx. Point Pleasant, rather rare.

**Q. coccinea**, Wang. Woods, common in M. and Mer.

*Var. tinctoria*, Bartram. Dry hills, not rare. Camden. (*Canby*.)

**Q. rubra**, L. Hills and dry woods, common.

**Q. palustris**, Du Roi. Wet grounds, sparingly found in Mer., M., and Mid.

**Castanea**, Tourn. (Chestnut.)

**C. vesca**, L. Dry, sandy soil, not rare.

**Fagus**, Tourn. (Beech.)

**F. ferruginea**, Ait. Banks of Squan and Shark rivers and in Upper Freehold, not common.

**Corylus**, Tourn. (Hazel-nut—Filbert.)**C.** *Americana*, Walt. Thickets and river banks, common.**C.** *rostrata*, Ait. Mer. (*Dr. Torrey.*)**Ostrya**, Michx. (Hop-Hornbeam—Iron-wood.)**O.** *Virginica*, Willd. Along streams and the borders of damp woods, not rare.**Carpinus**, L. (Hornbeam—Iron-wood.)**C.** *Americana*, Michx. River banks, not rare.ORDER 103. **MYRICACEÆ**. SWEET-GALE FAMILY**Myrica**, L. (Bayberry—Wax-Myrtle.)**M.** *Gale*, L. W. (*Knighton.*)**M.** *cerifera*, L. Dry, sandy soils, very common.**Comptonia**, Solander. (Sweet-Fern.)**C.** *asplenifolia*, Ait. Dry, sandy soils, very common.ORDER 104. **BETULACEÆ**. BIRCH FAMILY.**Betula**, Tourn. (Birch.)**B.** *lenta*, L. Damp woods, M. and Mer.**B.** *alba*, Spach. Poor soils, common.*Var.* *populifolia*. W. (*Knighton.*)**B.** *papyracea*, Ait. W. (*Knighton.*)**B.** *nigra*, L. River banks, common.**B.** *pumila*, L. East of Phillipsburg. (*Porter.*)**Alnus**, Tourn. (Alder.)**A.** *incana*, Willd. Budd's Lake, Mor. (*Porter.*)**A.** *serrulata*, Ait. River banks and swamps, common.ORDER 105. **SALICACEÆ**. WILLOW FAMILY.**Salix**, Tourn. (Willow—Osier.)**S.** *candida*, Willd. Wet places.**S.** *tristis*, Ait. Margins of swamps.**S.** *humilis*, Marshall. Mer. and M. (*Dr. Torrey.*)**S.** *discolor*, Muhl. W. (*Knighton.*)**S.** *petiolaris*, Smith. W. (*Knighton.*)**S.** *cordata*, Muhl. Mer. (*Dr. Torrey.*)**S.** *livida*, Wuhl.*Var.* *occidentalis*, Gray. W. (*Porter.*)*Var.* *longifolia*, Muhl. W. (*Porter.*)**S.** *viminialis*, L. W. (*Knighton.*)**S.** *lucida*, Muhl. Budd's Lake, Mor. (*Porter.*)

**S. nigra**, Marshall.—Damp borders of streams, common.

**S. Babylonica**, Tourn. W. (*Knighton*.)

**S. myrtilloides**, L. Budd's Lake, Mor. (*Porter*.)

**Populus**, Tourn. (Poplar—Aspen.)

**P. tremuloides**, Michx. Woods, not rare.

**P. grandidentata**, Michx. Common in Mer. and M.

**P. angulata**, Ait. W. (*Porter*.)

**P. balsamifera**, L.

*Var. candicans*, Gray. (Balm of Gilead.) Not rare.

**P. alba**, L. Common in northern parts of the State. (*Knighton*.)

ORDER 106. **CONIFERÆ**. PINE FAMILY.

**Pinus**, Tourn. (Pine.)

**P. rigida**, Miller. Both dry and wet soils. The most common species of this genus.

**P. inops**, Ait. Sandy soils, M. and Bur.

**P. mitis**, Michx. Dry, sandy soils, common.

**P. Strobus**, L. Dry and damp soils, common in M. (*Knieskern*.)

**Abies**, Tourn. (Spruce—Fir.)

**A. nigra**, Poir. Hunterdon. (*Knighton*.) Budd's Lake. (*Porter*.)

**A. Canadensis**, Michx. Shady borders of swamps, very rare.

**A. balsamea**, Marshall. This tree, a few years ago, could have been found about Bordentown, but I presume it has escaped from planted inclosures.

**Larix**, Tourn. (Larch.)

**L. Americana**, Michx. Mer., near Princeton. (*Dr. Torrey*.) I have not seen this tree in the State outside of planted inclosures; Dr. Knighton reports it common in W.

**Thuja**, Tourn. (Arbor Vitæ.)

**T. occidentalis**, L. W. (*Knighton*.)

**Cupressus**, Tourn. (Cypress.)

**C. thujoides**, L. Swamps, O., very common. Also in M. and Mer.

**Juniperus**, L. (Juniper.)

**J. communis**, L. M. and Mer., rare. (*Dr. Torrey*.)

**J. Virginiana**, L. Fence-rows and along the coast, common throughout the State. Sports widely.

**J. Sabina**, W. (*Knighton*.)



## CLASS II. MONOCOTYLEDONOUS OR ENDOGENOUS PLANTS.

ORDER 107. **ARACEÆ.** ARUM FAMILY.

**Arisæma**, Martius. (Indian Turnip—Dragon-Arum.)

**A. triphyllum**, Torr. Shady ravines and river banks, rare, in middle counties, reported common in W. (*Knigh-ton*.)

**Peltandra**, Raf. (Arrow Arum.)

**P. Virginica**, Raf. Wet places and in water, not rare.

**Calla**, L. (Water Arum.)

**C. palustris**, L. Budd's Lake, Mor. (*Porter*.)

**Symplocarpus**, Salisb. (Skunk Cabbage.)

**S. fœtidus**, Salisb. Wet places, common.

**Orontium**, L. (Golden-club.)

**O. aquaticum**, L. Swamps and in shallow streams, rare. Reported near Budd's Lake, Mor. (*Porter*.)

**Acorus**, L. (Sweet Flag—Calamus.)

**A. Calamus**, L. Borders of swamps, common.

ORDER 108. **LEMNACEÆ.** DUCKWEED FAMILY.

**Lemna**, L. (Duckweed—Duck's-meat.)

**L. trisulca**, L. M. (*Dr. Torrey*.)

**L. minor**, L. M. (*Dr. Torrey*.)

**L. polyrrhiza**, L. M. (*Dr. Torrey*.) I have not seen any of this genus in the State.

ORDER 109. **TYPHACEÆ.** CAT-TAIL FAMILY.

**Typha**, Tourn. (Cat-tail Flag.)

**T. latifolia**, L. Deep swamps or ponds, not rare.

**T. angustifolia**, L. Borders of creeks near salt water, rare.

**Sparganium**, Tourn. (Bur-reed.)

**S. racemosum**,

**S. simplex**, Hudson. Shallow streams and pools, common.

ORDER 110. **NAIADACEÆ.** PONDWEED FAMILY.

**Naias**, L. (Naiad.)

**N. flexilis**, Rostk. Sluggish brooks.

**Zannichellia**, Micheli. (Horned Pondweed.)

**Z. palustris**, L. Sluggish waters, not common.

**Zostera**, L. (Grass-wrack—Eel-grass.)

**Z. marina**, L. Barnegat bay, Squan and Shark rivers.

**Ruppia**, L. (Ditch-grass.)

**R. maritima**, L. Tom's River, in four feet water, rare. (*Knieskern*.)

**Potamogeton**, Tourn. (Pondweed.)

**P. natans**, L. Shallow water, not rare.

**P. Claytonii**, Tuckerman, Gently flowing streams, common.

**P. hybridus**, Michx. Still waters, common.

**P. pulcher**, Tuckerman. Tom's River. (*Porter*.) Also Atlantic City. (*Canby*.)

**P. lucens**, L. Upper part of M., not common.

**P. perfoliatus**, L. M. and Mer. (*Dr. Torrey*.)

**P. pauciflorus**, Pursh. Slow running streams, not rare.

**P. Tuckermani**, Robbins. Atsion, Camden. (*Canby*.)

**P. pectinatus**, L. M. (*Dr. Torrey*.)

**P. Robbinsii**, Oakes. Budd's Lake. (*Porter*.)

#### ORDER 111. **ALISMACEÆ**. WATER-PLANTAIN FAMILY.

**Triglochin**, L. (Arrow-grass.)

**T. maritimum**, L. Wet grounds, M., not common.

**Scheuchzeria**, L. (Scheuchzeria.)

**S. palustris**, L. Budd's Lake, Mor. (*Porter*.)

**Alisma**, L. (Water-Plantain.)

**A. Plantago**, L. Along Stony Brook, near Princeton, common.

**Sagittaria**, L. (Arrow-head.)

**S. variabilis**, Engelm. Wet places, ponds, etc., common. Leaves vary from 3 in. to  $\frac{1}{2}$  an inch in width.

**S. heterophylla**, Pursh. Camden, frequent. (*Canby*.)

#### ORDER 112. **HYDROCHARIDACEÆ**. FROG'S-BIT FAMILY.

**Limnobium**, Richard. (American Frog's-bit.)

**L. Spongia**, Richard. Swimming River, M., rare.

**Anacharis**, Richard. (Water-weed.)

**A. Canadensis**, Planchon. Sluggish streams, common.

**Vallisneria**, Micheli. (Tape-grass—Eel-grass.)

**V. spiralis**, L. Slow rivers, not rare.

ORDER 114. **ORCHIDACEÆ.** ORCHIS FAMILY.**Orchis**, L. (Orchis.)

- O. spectabilis*, L. Swamps in the pines of M., south of Freehold.

**Habenaria**, Willd., R. Br. (Rein-Orchis.)

- H. tridentata*, Hook. Cold, shady swamps, rare.  
*H. integra*, Spreng. Wet places, not common.  
*H. cristata*, R. Br. Atsion. (*Canby*.)  
*H. ciliaris*, R. Br. Wet meadows, sparingly throughout the State.  
*H. blephariglottis*, Hook. Swamps, common.  
*H. lacera*, R. Br. Damp wood edges, Hightstown.  
*H. psycoides*, Gray. Meadows.  
*H. fimbriata*, R. Br. W. (*Knighton*.) Budd's Lake. (*Porter*.)  
*H. peramœna*, Gray. Damp, low grounds, Lawrenceville, M. (*Lanning*.)

**Goodyera**, R. Br. (Rattlesnake-Plantain.)

- G. pubescens*, R. Br. Rich woods near Hightstown and Freehold.

**Spiranthes**, Richard. (Ladies' Tresses.)

- S. cernua*, Richard. Wet meadows, common.  
*S. gracilis*, Bigelow. Sandy plains, common.

**Listera**, R. Brown. (Twayblade.)

- L. cordata*, R. Brown. Mer. (*Dr. Torrey*.)  
*L. australis*, Lindl. Camden. (*Canby*.)

**Arethusa**, Gronov. (Arethusa.)

- A. bulbosa*, L. This beautiful plant is found sparingly in the swamps near Freehold.

**Pogonia**, Juss. (Pogonia.)

- P. ophioglossoides*, Nutt. Swamps, not rare.  
*P. verticillata*, Nutt. Rare. This plant flowers very sparingly; I discovered a locality, about half a mile east of Freehold, which contained from one to two hundred plants; and although I visited it throughout the season for several successive years, I never found but one specimen in flower.

**Calopogon**, R. Br. (Calopogon.)

- C. pulchellus*, R. Br. Bogs, common.

**Tipularia**, Nutt. (Crane-fly Orchis.)

- T. discolor*, Nutt. Dry woods, near Freehold, rare.

**Microstylis**, Nutt. (Adder's-Mouth.)**M. ophioglossoides**, Nutt. Mer. (*Dr. Torrey.*)**Liparis**, Richard. (Twayblade.)**L. liliifolia**, Richard. Near Manchester, O., rare.**L. Læselii**, Richard. W. (*Porter.*)**Corallorhiza**, Haller. (Coral-root.)**C. odontorhiza**, Nutt. Mer., near Princeton.**C. multiflora**, Nutt. Near Princeton.**Cypripedium**, L. (Lady's Slipper—Moccasin-flower.)**C. parviflorum**, Salisb. W. (*Knighton.*)**C. pubescens**, Willd. Damp thickets, near Englishtown, Mid.**C. spectabile**, Swartz. Wet places, Freehold, not common.**C. acaule**, Ait. Woods, not common.ORDER 115. **AMARYLLIDACEÆ.** AMARYLLIS FAMILY.**Hypoxys**, L. (Star-grass.)**H. erecta**, L. Dry woods and fields, common.ORDER 116. **HÆMODORACEÆ.** BLOODWORT FAMILY.**Lachnanthes**, L. (Red-root.)**L. tinctoria**, Ell. Sandy swamps near Manchester, O., rare.**Lophiola**, Ker. (Lophiola.)**L. aurea**, Ker. Sandy swamps, O., not rare.**Aletris**, L. (Colic-root—Star-grass.)**A. farinosa**, L. Dry or damp grassy places, common.**A. aurea**, Walt. About Freehold.ORDER 118. **IRIDACEÆ.** IRIS FAMILY.**Iris**, L. (Flower-de-Luce.)**I. versicolor**, L. Wet places, common.**I. Virginica**, L. Marshes near the coast, not common.**Sisyrinchium**, L. (Blue-eyed Grass.)**S. Bermudiana**, L. Damp grassy places, common.ORDER 119. **DIOSCOREACEÆ.** YAM FAMILY.**Dioscorea**, Plumier. (Yam.)**D. villosa**, L. Swamps, not rare.

ORDER 120. **SMILACEÆ.** SMILAX FAMILY.**Smilax**, Tourn. (Greenbrier—Catbrier.)

- S. Walteri**, Pursh. Camden. (*Canby*.)  
**S. rotundifolia**, L. Woods and damp thickets, common.  
*Var. quadrangularis*.  
**S. glauca**, Walt. Common in M. and Mer.  
**S. hispida**, Muhl. Hunterdon and W. (*Knighton*.)  
**S. Pseudo-China**, L. Waste grounds, common.  
**S. laurifolia**, L. Pine woods of South Monmouth.  
**S. herbacea**, L. Damp grounds, common.  
**S. tamnifolia**, Michx. Open fields and shady places, not rare.

ORDER 121. **LILIACEÆ.** LILY FAMILY.**Trillium**, L. (Three-leaved Nightshade.)

- T. erectum**, L. W. (*Knighton*.)  
**T. cernuum**, L. Moist woods, Freehold.

**Medeola**, Gronov. (Indian Cucumber-root.)

- M. Virginica**, L. Rich, shady woods, rather rare.

**Melanthium**, Gronov., L. (Melanthium.)

- M. Virginicum**, L. Wet meadows, rather rare.

**Zygadenus**, Michx. (Zygadene.)

- Z. leimanthoides**, Gray. Wet meadows, rather rare.

**Veratrum**, Tourn. (False Hellebore.)

- V. viride**, Ait. Low grounds, not common, M.

**Amianthium**, Gray. (Fly-Poison.)

- A. muscætoxicum**, Gray. Mer. (*Dr. Torrey*.)

**Xerophyllum**, Michx. (Xerophyllum.)

- X. asphodeloides**, Nutt. Pine barrens, more common in O.

**Helonias**, L. (Helonias.)

- H. bullata**, L. Swamps near Freehold and Camden, very rare.  
(*Canby*.)

**Chamælorium**, Willd. (Devil's-Bit.)

- C. luteum**, Gray. Mer. (*Dr. Torrey*.)

**Tofieldia**, Hudson. (False Asphodel.)

- T. pubens**, Ait. Near Manchester, in a swamp, rare, O.

**Uvularia, L.** (Bellwort.)**U. perfoliata, L.** Damp grounds, common.**U. sessilifolia, L.** Damp, shady places, not rare.**Convallaria, L.** (Lily of the Valley.)**C. majalis, L.** Damp grounds in borders of thickets, Freehold.**Smilacina, Desf.** (False Solomon's Seal.)**S. racemosa, Desf.** Shady copses, not rare.**S. stellata, Desf.** Borders of meadows along brooks, Freehold.**S. trifolia, Desf.** Shady places, very rare.**S. bifolia, Ker.** Damp, open woods, common.**Polygonatum, Tourn.** (Solomon's Seal.)**P. biflorum, Ell.** Along fences and waste places, not rare.**P. giganteum, Dietrich.** Rich soil on river banks, common.**Asparagus, L.** (Asparagus.)**A. officinalis, L.** Waste places along the coast, not common.**Lilium, L.** (Lily.)**L. Philadelphicum, L.** Open copses, not rare.**L. Canadense, L.** Moist bogs and meadows, not common.**L. superbum, L.** Rich, low meadows, common; a fine, showy species.**Erythronium, L.** (Dog's-tooth Violet.)**E. Americanum, Smith.** Along brooks, not rare.**E. albidum, Hunterdon.** (*Knighton.*)**Ornithogalum, Tourn.** (Star-of-Bethlehem.)**O. umbellatum, L.** Damp meadows, Squankum, M.**Allium, L.** (Onion—Garlic.)**A. cernuum, Roth.** Fields, too common.**A. vineale, L.** Common in pastures.**Hemerocallis, L.** (Day-Lily.)**H. fulva, L.** Cultivated or waste places, rare.**Narthecium, Mœhring.** (Bog-Asphodel.)**N. ossifragum, Huds.****Var. Americanum.** Pine barrens and swamps. (*Canby.*)ORDER 122. **JUNCACEÆ.** RUSH FAMILY.**Luzula, DC.** (Wood-rush.)**L. campestris, DC.** Dry fields and woods, rather common.

**Juncus**, L. (Rush—Bog-rush.)*J. effusus*, L. Wet meadows, common.*J. marginatus*, Rostkovius. \* Low grounds, M. (*Dr. Torrey.*)*J. bufonius*, L. Road-sides in wet places, common.*J. tenuis*, Willd. Low grounds, Mer. (*Dr. Torrey.*)*Var. secundus*, Eng. W. (*Porter.*)*J. dichotomus*, Ell. South Jersey. (*Canby.*)*J. pelocarpus*, E. Meyer. Mor. (*Porter.*)*Var. subtilis*. Mor. (*Porter.*)*J. militaris*, Bigel. Near Manchester, O., not common.*J. acuminatus*, Michx.*Var. debilis*. South Jersey. (*Canby.*)*Var. legitimus*. South Jersey. (*Canby.*)*J. nodosus*, L. Wet and swampy ground, M. (*Dr. Torrey.*) Gravelly hill-sides, W. (*Knighton.*)*J. scirpoides*, Lam. Wet borders of streams, not rare.*J. Canadensis*, J. Gay.*Var. longicaudatus*. South Jersey. (*Canby.*)*J. asper*, Engelm. South Jersey. (*Canby.*)ORDER 123. **PONTEDERIACEÆ**. PICKEREL-WEED FAMILY.**Pontederia**, L. (Pickerel-weed.)*P. cordata*, L. Shallow water, not rare.**Heteranthera**, Ruiz and Pav. (Mud-Plantain.)*H. reniformis*, Ruiz and Pav. Muddy places, Mer. (*Dr. Torrey.*)**Schollera**, Schreber. (Water Star-grass.)*S. graminea*, Willd. Slow streams, Mer.ORDER 124. **COMMELYNACEÆ**. SPIDERWORT FAMILY.**Tradescantia**, L. (Spiderwort.)*T. Virginica*, L. Waste places, not common.ORDER 125. **XYRIDACEÆ**. YELLOW-EYED GRASS FAMILY.**Xyris**, L. (Yellow-eyed Grass.) Boggy pastures.*X. flexuosa*, Muhl. South Jersey, boggy pastures. (*Canby.*)*X. torta*, Smith. South Jersey. (*Canby.*)*X. Caroliniana*, Walt. Sandy swamps, quite common.*X. fimbriata*, Ell. Pine barrens near Manchester, O., rare.ORDER 126. **ERIOCAULONACEÆ**. PIPEWORT FAMILY.**Eriocaulon**, L. (Pipewort.)*E. decangulare*, L. Pine barren swamps, common.*E. gnaphalodes*, Michx. South Jersey. (*Canby.*)

**E. septangulare**, Withering. Ponds, or the borders of them, not rare, O.

ORDER 127. **CYPERACEÆ.** SEDGE FAMILY.

**Cyperus**, L. (Galingale.)

**C. flavescens**, L. Low grounds, near Good-Luck Point, O., very rare. (*Knieskern*.)

**C. diandrus**, Torr. Low grounds, common.

*Var. castaneus*, Torr. With the former, common.

**C. Nuttallii**, Torr. Common near salt or brackish water.

**C. dentatus**, Torr. Sandy swamps, common near the coast.

**C. phymatodes**, Muhl. Camden. (*Canby*.)

**C. strigosus**, L. Low and rich grounds, common.

**C. Michauxianus**, Schultes. Wet, shady places, common.

**C. Grayii**, Torr. Barren, sandy soil, near the coast.

**C. filiculmis**, Vahl. Barren, sandy soils, not rare.

**C. ovularis**, Torr. Sandy fields and road-sides, common.

**C. retrofractus**, Torr. Old fields, near Hightstown.

**Dulichium**, Richard. (*Dulichium*.)

**D. spathaceum**, Pers. Borders of ponds, swamps.

**Fuirena**, Rottböll. (Umbrella-Grass.)

**F. squarrosa**, Michx. Salt marshes, Tom's River, O., rare. Pines of South Jersey. (*Canby*.)

*Var. pumila*, Torr. Near Shark River, M., rare.

**Eleocharis**, R. Br. (Spike-Rush.)

**E. Robbinsii**, Oakes. M. and Quaker Bridge. (*Canby*.)

**E. tuberculosa**, R. Br. Wet, sandy places, not far from the sea-coast, common.

**E. obtusa**, Schultes. Muddy places, not common.

**E. olivacea**, Torr. Wet, sandy places, common.

**E. palustris**, R. Br. South Jersey, common. (*Canby*.) M. and O.

(*Dr. Torrey*.)

**E. intermedia**, Schultes. Wet banks, M. and O.

**E. microcarpa**, Torr. Pine forests, M. and O.

**E. tenuis**, Schultes. Swamps and wet places, common.

**E. melanocarpa**, Torr. Sandy swamps, M. and Quaker Bridge.

(*Canby*.)

**E. tricostata**, Torr. Near Quaker Bridge and Webb's old field, the northern limit of this plant, rare, O. (*Knieskern* and *Canby*.)

**E. acicularis**, R. Br. Muddy borders of ponds, common.

**E. pygmaea**, Torr. Edges of salt meadows, M. and O.



**Scirpus, L.** (Bulrush or Club-Rush.)

- S. subterminalis*, Torr. Slow running streams, rare, O.  
*S. pungens*, Vahl. Borders of salt and fresh water, common.  
*S. Olneyi*, Gray. Salt marshes, Tom's River, O., and near Squan Village, M., rare.  
*S. validus*, Vahl. Fresh water ponds, common.  
*S. debilis*, Pursh. Swamps, M. and Mer. (*Dr. Torrey.*)  
*S. Smithii*, n. sp. Camden. (*Canby.*)  
*S. maritimus*, L. Salt meadows, common.  
*S. Eriophorum*, Michx. Wet meadows and swamps, common.

**Eriophorum, L.** (Cotton-Grass.)

- E. Virginicum*, L. Bogs and wet places, common.  
*E. polystachyon*, L. Peat-bogs, not common.

**Fimbristylis, Vahl.**

- F. spadicea*, Vahl. Salt marshes, common.  
*F. autumnalis*, Rœm. and Schult. Low grounds, common.  
*F. capillaris*, Gray. Dry barren and sandy fields, common.

**Dichromena, Richard.** (Dichromena.)

- D. leucocephala*, Michx. Wet places among the pine forests, M. and O.

**Rhynchospora, Vahl.** (Beak-Rush.)

- R. cymosa*, Nutt. Damp grounds near Newberry Pond, on Commodore Stockton's farm, Squan, M., rare. (*Knieskern.*) Also in W. (*Knighton.*)  
*R. Torreyana*, Gray. Damp grounds and road-sides, O., rare.  
*R. fusca*, Rœm. and Schultes. Swamps near Manchester, O., abundant.  
*R. gracilentia*, Gray. Low, sandy swamps, common.  
*R. pallida*, M. A. Curtis. Atsion. (*Canby.*)  
*R. alba*, Vahl. Cranberry bogs, common.  
*R. Knieskernii*, Carey. Paint-Hollow, on bog-iron-ore beds, two miles from Manchester, O., near Cassville, rare. (*Knieskern.*)  
*R. glomerata*, Vahl. Low grounds, everywhere common.  
*R. cephalantha*, Torr. Bogs near Manchester, O., very rare.  
*R. macrostachya*, Torr. Beaverdam, Manchester, M., rare. South Jersey. (*Canby.*)

**Cladium, P. Browne.** (Twig-Rush.)

- C. mariscoides*, Torr. Bogs, common near the coast.

**Scleria, L.** (Nut Rush.)

- S. triglomerata*, Michx. Low and rather dry soils, common.

*S. laxa*, Torr. Paint-Hollow, near Manchester, O.

*S. pauciflora*, Muhl. Near Shark River, M. Dry upland, rare.

**Carex**, L. (Sedge.)

*C. polytrichoides*, Muhl. South Jersey, common. (*Canby*.)

*C. Willdenovii*, Schk. On the Delaware, Hunterdon. (*Porter*.)

*C. bromoides*, Schk. Hunterdon. (*Knighton*.)

*C. teretiuscula*, Good. Budd's Lake, Mor. (*Porter*.)

*C. vulpinoidea*, Michx. Low meadows, common.

*C. stipata*, Muhl. Swamps and wet meadows, common.

*C. cephalophora*, Muhl. Meadow-woods near Squan Village, M., rare.

*C. Muhlenbergii*, Schk. Dry, sandy fields, rare.

*C. rosea*, Schk. Meadow-woods near Squan Village, M., not common.

*C. retroflexa*, Muhl. Meadow-woods near Squan Village, M., rare.

*C. tenella*, Schk. Budd's Lake, Mor. (*Porter*.)

*C. trisperma*, Dewey. Shady swamps near Manchester, very rare.

*C. canescens*, L. Marshes and wet meadows, common.

*Var. vitilis*. Buddstown, Bur. (*Canby*.)

*C. exilis*, Dewey. Low swamps, Manchester and Burrsville, O. Near Shark River, M. Abundant in some localities. Also Absecum. (*Canby*.)

*C. sterilis*, Willd. Wet places, common.

*C. stellulata*, L. Wet meadows and marshes, common.

*Var. scirpoides*, in similar localities, common.

*Var. angustata*. Marshes, common.

*C. scoparia*, Schk. Low meadows and swamps, very common.

*C. fœnea*, Willd. Wet places, common near the coast.

*Var. sabulonum*, Atlantic City. (*Canby*.)

*C. straminea*, Schk. Dry fields and along fences, rather rare.

*Var. moniliformis*, Tuckermann. Occurs on the coast, common.

*C. alta*, Torr. Atlantic City. (*Canby*.)

*C. stricta*, Lam. Swamps and wet meadows, common.

This is the *C. acuta* of Muhlenberg, and American authors.

*C. salina*, Wahl. On the banks of a branch of Tom's River, two miles northeast of Manchester, O., where it is abundant. This species is included with some hesitation, but it compares very well with my specimens of this plant from Sweden. (*Knieskern*.)

*C. crinita*, Lam. Wet meadows and streams, a variable species, common.

*C. Barrattii*, Schw. and Torr. Borders of swamps and marshes, common about Manchester, O., but rare elsewhere, a variable but very fine species.

*C. livida*, Willd. Occurs in abundance and perfection in swamps about Manchester, O., a fine species.

*C. pallescens*, L. Meadows, New Egypt, O., very rare.

- C. grisea*, Wahl. (*C. laxiflora*, Schk.) New Egypt, O., rare.  
*Var. mutica*, Carey. Near Hornerstown, O., on upland.  
*C. virescens*, Muhl. Meadows, pastures, and woods, common.  
*C. triceps*, Michx. Damp meadows, not very common.  
*C. digitalis*, Willd. Squan, damp soils, very rare.  
*C. laxiflora*, Lam.  
*Var. striatula*, Carey. Damp, shady places, common.  
*Var. patulifolia*, Dewey. Shady places. A very variable species as to size and form of leaves, etc.  
*C. umbellata*, Schk. Dry, sandy fields, common.  
*C. Novæ-Angliæ*, Schw. Open plains and hill-sides.  
*C. Emmonsii*, Dew. South Jersey, a fine species. (*Canby*.)  
*C. Pennsylvanica*, Lam. Dry, open barrens and hills, common.  
*C. miliacea*, Muhl. South Jersey. (*Canby*.)  
*C. glabra*, Boott. Pines, South Jersey. (*Canby*.)  
*C. debilis*, Michx. Wet meadows and springy hill-sides, common.  
*C. lanuginosa*, Michx. Wet meadows, near Squan Village, M., rare.  
*C. vestita*, Willd. Slightly damp fields and open woods, rare.  
*C. polymorpha*, Muhl. (*C. Halseyana*, Dewey.) Borders of swamps, rare.  
*C. striata*, Michx. Wet places near Manchester, O., not common.  
*C. hystericina*, Willd. Wet places, quite common.  
*C. tentaculata*, Muhl. Wet meadows, common. W., dry soils. (*Knighton*.)  
*C. intumescens*, Rudge. Swamps and wet meadows, common.  
*C. lupulina*, Muhl. South Jersey. (*Canby*.)  
*C. folliculata*, L. Swamps and wet meadows, common.  
*C. subulata*, Michx. Cedar-swamps and borders of small streams, quite common.  
*C. bullata*, Schk. Wet meadows and swamps, not rare.

ORDER 128. **GRAMINEÆ.** GRASS FAMILY.**Leersia**, Solander. (White Grass.)

- L. Virginica*, Willd. Damp, shady places, not common.  
*L. oryzoides*, Swartz. (Rice Cut-grass.) Wet places, common.

**Zizania**, Gronov. (Water or Indian Rice.)

- Z. aquatica*, L. (Indian Rice—Water Oats.) Near salt water, common.

**Alopecurus**, L. (Foxtail Grass.)

- A. aristulatus*, Michx. Mer. (*Dr. Torrey*.)

**Phleum**, L. (Cat's-tail Grass.)

- P. pratense*, L. (Timothy.) Meadows, cultivated.

**Vilfa**, Adans., Beauv. (Rush-Grass.)**V. aspera**, Beauv. Not common.**V. vaginaeflora**, Torr. Borders of woods, rare.**Sporobolus**, R. Br. (Drop-seed Grass.)**S. compressus**, Kunth. M. (*Dr. Torrey.*) South Jersey. (*Canby.*)**S. serotinus**, Gray. Swamps, common. (*Knieskern.*) South Jersey. (*Canby.*)**Agrostis**, L. (Bent-Grass.)**A. elata**, Trin. South Jersey. (*Canby.*)**A. perennans**, Tuckermann. M. (*Dr. Torrey.*)**A. scabra**, Willd. Not common.**A. vulgaris**, With. (Red-top.) Cultivated for hay and pasture.**A. alba**, L. (White Bent-Grass.) Damp places, rare.**Cinna**, L. (Wood Reed-Grass.)**C. arundinacea**, L. Shady places, rare.*Var. pendula*, Gray. South Jersey. (*Canby.*)**Muhlenbergia**, Schreber. (Drop-seed.)**M. sobolifera**, Trin. Open woods, Freehold.**M. glomerata**, Trin. Swampy places, Freehold.**M. Mexicana**, Trin. Shady places, rare.**M. sylvatica**, Torr. and Gray. Shady places, along fences, rare.**M. Willdenovii**, Trin. Shady places, not common.**M. diffusa**, Schreber. Shady places, not common.**Brachyelytrum**, Beauv.**B. aristatum**, Beauv. Shady banks, near Shark River, not common.**Calamagrostis**, Adans. (Reed Bent-Grass.)**C. Canadensis**, Beauv. Low meadows, near Squan and Shark rivers, common, M.**C. confinis**, Nutt. Swamps, Mer., not common.**C. Nuttalliana**, Steud. Damp and shady places, rare. South Jersey. (*Canby.*)**C. brevipilis**, Gray. Moderately damp places, rare.**C. arenaria**, Roth. Sandy beaches and sand-hills. Useful in binding drifting sands together, common.**Stipa**, L. (Feather-Grass.)**S. avenacea**, L. (Black Oat-Grass.) Dry, sandy or gravelly, open woods, common.**Aristida**, L. (Triple-awned Grass.)**A. dichotoma**, Michx. Dry, sandy fields and road-sides, common.

- A. gracilis*, Ell. Dry, sandy woods and road-sides, common.
- A. purpurascens*, Poir. Sandy fields and road-sides, not rare.
- A. tuberculosa*, Nutt. Sandy soils, Middletown, M., rare.

**Spartina**, Schreber. (Cord or Marsh Grass.)

- S. polystachya*, Willd., Muhl. (Salt Reed-Grass.) Salt or brackish marshes, within tide-water, common.
- S. juncea*, Willd. Damp, sandy beaches and salt marshes, common. (*Knieskern.*) Cape May. (*Canby.*)
- S. stricta*, Roth.
- Var. glabra.* Salt marshes, common.
- Var. alterniflora.* Cape May. (*Canby.*)

**Gymnopogon**, Beauv. (Naked-beard Grass.)

- G. racemosus*, Beauv. Sandy woods and pines of M. and O. Also South Jersey. (*Canby.*)

**Eleusine**, Gærtn. (Crab-Grass—Yard-Grass.)

- E. Indica*, Gærtn. A troublesome weed in cultivated grounds, common.

**Leptochloa**, Beauv.

- L. fascicularis*, Gray. Edges of salt meadows, M. and O.

**Tricuspis**, Beauv.

- T. seslerioides*, Torr. Dry, shady places, rare.
- T. purpurea*, Gray. Dry, white sand, not common.

**Dactylis**, L. (Orchard Grass.)

- D. glomerata*, L. Cultivated, rare.

**Koeleria**, Pers. (*Koeleria.*)

- K. cristata*, Pers. Dry places, Freehold.

**Eatonia**, Raf.

- E. obtusata*, Gray. Not common.
- E. Pennsylvanica*, Gray. Damp wooded places, common.

**Glyceria**, R. Br., Trin. (Manna-Grass.)

- G. Canadensis*, Trin. Bogs and wet places, not common.
- G. obtusa*, Trin. Wet meadows and swamps, rather common.
- G. nervata*, Trin. Wet meadows, common.
- G. pallida*, Trin. Sluggish, shallow streams, not rare.
- G. aquatica*, Smith. Wet grounds, common.
- G. fluitans*, R. Br. Wet places, not common.

**Brizopyrum**, Link. (Spike-Grass.)

**B. spicatum**, Hook. Salt meadows, common, O. and M. Also Cape May. (*Canby*.)

**Poa**, L. (Meadow-Grass—Spear-Grass.)

**P. annua**, L. Door-yards. Introduced, common.

**P. compressa**, L. Dry fields, not very common.

**P. serotina**, Ehrhart. Damp meadows along brooks, common.

**P. pratensis**, L. Cultivated for hay and pasture, common.

**P. trivialis**, L. Damp meadows, M.

**P. alsodes**, Gray. (*P. nemoralis*, Torr.) Borders of woods, not common.

**Eragrostis**, Beauv. (*Eragrostis*.)

**E. poæoides**, Beauv.

*Var. megastachya*, Gray. Waste places, gardens, rare.

**E. pilosa**, Beauv. Barren, sandy fields, not rare.

**E. Frankii**, Meyer. W. (*Porter*.)

**E. Purshii**, Schrader. W. (*Porter*.)

**E. capillaris**, Nees. Dry, sandy fields, not common. W. (*Porter*.)

**Festuca**, L. (Fescue-Grass.)

**F. Myurus**, L. Atsion. (*Canby*.)

**F. tenella**, Willd. Dry, sandy soil, not very rare.

**F. ovina**, Gray. (*Var. duriuscula*, Gray.) Near the coast, not rare.

**F. elatior**, L. Damp meadows, not rare.

**F. nutans**, Willd. Meadows, not common.

**Bromus**, L. (Brome-Grass.)

**B. secalinus**, L. (Chess.) Too common in wheat-fields. There is a popular idea, still prevailing, that wheat will change into chess, but there is nothing in observation or experiment to justify such a belief.

**B. Kalonii**, Gray. Shady woods and river banks, not rare.

**B. racemosus**, L. Grain-fields, W. (*Knighton*.)

**Uniola**, L. (Spike-Grass.)

**U. gracilis**, Michx. Borders of woods and thickets, common, O. (*Knieskern*.) South Jersey. (*Canby*.)

**Phragmites**, Trin. (Reed.)

**P. communis**, Trin. Good-Luck meadows, O., rare.

**Lolium**, L. (Darnel.)

**L. perenne**, L. Meadows, not common.

**Triticum**, L. (Wheat.)

**T. repens**, L. Along fences, not common in middle counties. Reported as a troublesome weed in the north. (*Knighon*.)

**Elymus**, L. (Lyme-Grass—Wild Rye.)

**E. Virginicus**, L. Banks of small streams, rare.

**E. Canadensis**, L. Banks of Shark River, rare.

**E. striatus**, Willd. Banks of streams, rare.

**Danthonia**, DC. (Wild Oat-Grass.)

**D. spicata**, Beauv. Dry barrens, very common.

**D. sericea**, Nutt. This southern species has been found near Manchester, O., in a single locality, rare. (*Knieskern*.)

**Aira**, L. (Hair-Grass.)

**A. flexuosa**, L. Dry hill-sides, not common.

**A. cæspitosa**, L. Damp places, rare.

**Arrhenatherum**, Beauv. (Oat-Grass.)

**A. avenaceum**, Beauv. Meadows, Shark River, M.

**Holcus**, L. (Meadow Soft-Grass.)

**H. lanatus**, L. (Velvet-Grass.) Meadows, not rare.

**Hierochloa**, Gmelin. (Holy-Grass.)

**H. borealis**, Roem. and Schultes. Border of salt marshes, near Squan Village, M., very rare. (*Knieskern*.) Salem. (*Canby*.)

**Anthoxanthum**, L. (Sweet Vernal-Grass.)

**A. odoratum**, L. Meadows, common.

**Phalaris**, L. (Canary-Grass.)

**P. arundinacea**, L. Wet places, common.

**Amphicarpum**, Kunth.

**A. Purshii**, Kunth. Wet, sandy places, near Manchester, O., very rare. (*Knieskern*.) South Jersey. (*Canby*.)

**Paspalum**, L. (Paspalum.)

**P. setaceum**, Michx. Dry, sandy fields, common.

**P. læve**, Michx. Damp meadows, not common.

**Panicum**, L. (Panic-Grass.)

**P. filiforme**, L. Dry, sandy soils and road-sides, common.

**P. glabrum**, Gaudin. Waste places, common.

- P. sanguinale**, L. Waste and cultivated fields, common.  
**P. anceps**, Michx. Wet, sandy soils, pine barrens, O., common.  
**P. agrostoides**, Spreng. Wet meadows, common, M.  
**P. proliferum**, Lam. Edges of salt marshes.  
**P. capillare**, L. Cultivated fields, rich soils, common.  
**P. virgatum**, L. Dry and moist, sandy and gravelly soils, not rare.  
**P. amarum**, Ell. Cape May. (*Canby*.)  
**P. latifolium**, L. Thickets and river banks, common.  
**P. clandestinum**, L. Shady places, common.  
**P. dichotomum**, L. Dry and damp soils, woods and fields, a very variable species everywhere, common.  
**P. depauperatum**, Muhl. Hill-sides, common.  
**P. verrucosum**, Muhl. Sandy swamps, near the coast, rare.  
**P. Crus-galli**, L. (Barnyard-Grass.) Rich, cultivated fields.  
*Var. hispidum*, Gray. Near salt water, usually of a brown color and with long awns, common.

**Setaria**, Beauv. (Bristly Fox-tail Grass.)

- S. verticillata**, Beauv. Cultivated fields, not common.  
**S. glauca**, Beauv. Fields and yards, not common.  
**S. viridis**, Beauv. Fields, rare.

**Cenchrus**, L. (Hedgehog or Bur-Grass.)

- C. tribuloides**, L. Sandy soils, too common.

**Erianthus**, Michx. (Woolly Beard-Grass.)

- E. alopecuroides**, Ell. Pines in South Jersey. (*Canby*.)

**Andropogon**, L. (Beard-Grass.)

- A. furcatus**, Muhl. Dry and damp soil, rare.  
**A. scoparius**, Michx. Sandy soils and barren plains, common.  
**A. Virginicus**, L. Sandy soils, not rare.  
**A. macrourus**, Michx. Low grounds, common.

**Sorghum**, Pars. (Broom Corn.)

- S. nutans**, Gray. Dry soils, common.  
**S. vulgare**, L. Hunterdon and W. (*Knighton*.)



## SERIES II.

## CRYPTOGAMOUS OR FLOWERLESS PLANTS.

## CLASS III. ACROGENS.

ORDER 129. **EQUISETACEÆ.** HORSETAIL FAMILY.

- Equisetum**, L. (Horsetail—Scouring Rush.)  
**E. arvense**, L. Damp places, common.  
**E. limosum**, L. About Freehold.  
**E. hyemale**, L. (Scouring Rush.) Wet banks, rare. Reported in the north by (*Knighton*.)

ORDER 130. **FILICES.** FERNS.

- Polypodium**, L. (Polypody.)  
**P. vulgare**, L. M. (*Dr. Torrey*.)  
**Adiantum**, L. (Maidenhair.)  
**A. pedatum**, L. M. (*Dr. Torrey*.)  
**Pteris**, L. (Brake or Bracken.)  
**P. aquilina**, L. (Common Brake.) Pine barrens and woods, common.  
**Cheilanthes**, Swartz. (Lip-Fern.)  
**C. vestita**, Swartz. Lambertville. (*Canby*.)  
**Woodwardia**, Smith. (Chain-Fern.)  
**W. Virginica**, Smith. Swamps, common.  
**W. angustifolia**, Smith. Borders of swamps, common.  
**Asplenium**, L. (Spleenwort.)  
**A. Trichomanes**, L. M. (*Dr. Torrey*.)  
**A. ebeneum**, Ait. M. (*Dr. Torrey*.)  
**A. thelypteroides**, Michx. Damp woods, Freehold.  
**A. Filix-fœmina**, Bernh. Damp woods, Freehold.  
**Camptosorus**, Link. (Walking-leaf.)  
**C. rhizophyllus**, Link.  
**Aspidium**, Swartz. (Shield-Fern—Wood-Fern.)  
**A. Thelypteris**, Swartz. Wet grounds, Freehold and Mer. (*Dr. Torrey*.)

*A. Noveboracense*, Swartz. Moist thickets, common. Mer. (*Dr Torrey*.)

*A. spinulosum*, Swartz. Mer. (*Dr. Torrey*.)

*A. Goldianum*, Hook. W. (*Porter*.)

*A. marginale*, Swartz. M. (*Dr. Torrey*.)

*A. acrostichoides*, Swartz. Hill-sides and shady ravines, not common.

*Cystopteris*, Bernh. (Bladder-Fern.)

*C. bulbifera*, Bernh. Shady valleys, Freehold.

*C. fragilis*, Bernh. Shaded hill-sides, Freehold.

*Onoclea*, L. (Sensitive Fern.)

*O. sensibilis*, L. Damp or wet places, common.

*Woodsia*, R. Brown. (*Woodsia*.)

*W. Ilvensis*, R. Brown. W. (*Porter*.)

*Dicksonia*, L'Her. (*Dicksonia*.)

*D. punctilobula*, Kunze. Damp wood-sides, common.

*Schizæa*, Smith. (*Schizæa*.)

*S. pusilla*, Pursh. Low grounds, Tom's River, and near Kettle-Creek, O., very rare. (*Knieskern*.)

*Lygodium*, Swartz. (Climbing Fern.)

*L. palmatum*, Swartz. This plant grows sparingly in damp, springy places in Mer. and M. In Mer. near Hightstown, on land belonging to Mr. John Ward; also near Shark River, in M. *Rancocus*. (*Canby*.)

*Osmunda*, L. (Flowering Fern.)

*O. regalis*, L.

*Var. spectabilis*, Gray. Swamps, common.

*O. Claytoniana*, L. Borders of damp meadows, Freehold and Hightstown.

*O. cinnamomea*, L. Damp woods, common.

*Botrychium*, Swartz. (Moonwort.)

*B. Virginicum*, Swartz. Shady woods, Freehold.

*B. lunarioides*, Swartz. Shady thickets, rare, M.

*Ophioglossum*, L. (Adder's-Tongue.)

*O. vulgatum*, L. M. (*Dr. Torrey*.)

#### ORDER 131. LYCOPODIACEÆ. CLUB-MOSS FAMILY.

*Lycopodium*, L., Spring. (Club-Moss.)

*L. lucidulum*, Michx. M. and Mer. (*Dr. Torrey*.)

- L. inundatum**, L. Wet, sterile grounds.  
**L. alopecuroides**, L. Damp fields and swamps, common.  
**L. dendroideum**, Michx. Shady woods, rare.  
**L. clavatum**, L. Woods, Freehold.  
**L. Carolinianum**, L. Borders of swamps, common.  
**L. complanatum**, L. Damp, open woods, neglected fields, rare.

**Selaginella**, Beauv., Spreng.

**S. apus**, Spreng. Point pleasant, O., rare.

**Isoetes**, L. (Quillwort.)

**I. echinospora**, Durieu. Mor. (*Porter.*)

*Var. Braunii*. Tom's River, O. (*Porter.*)

## CATALOGUE OF MARINE ALGÆ.

*Collected on the coast of Egg Harbor, at and near Beesley's Point, in  
Cape May County,*

BY SAMUEL ASHMEAD, ESQ.,

*and published in the Geological Report of Cape May County.*

### SERIES 1. MELANOSPERMEÆ.

**Fucus**, L.

**F. vesiculosus**, L. Very common between tide marks, on the shores of the Bays and the thoroughfares; not unfrequently attached to sods by a root penetrating several inches into the soil, throwing off numerous lateral shoots, having the appearance of undeveloped fronds, forming a strong hold-fast, and affording an interesting illustration of the modification of a discoid root, where local circumstances are unfavorable to such expansions. It is, however, more frequently found adhering by a conical disc to mussels (*Modiola plicatula*), which, at high water, unable to resist the buoyancy of the full-grown plant with its inflated vesicles, is, by degrees, wrested from its place of growth and cast upon the shore to perish, whence the *Fucus*, together with other marine plants, is carried away by the inhabitants for manure.

**Stilophora**, J. Ag.

**S. rhizodes**, J. Ag. Rather rare; on old shells, etc., near low-water mark. The few specimens which I obtained are fertile, of vigorous growth, and densely covered with wart-like fructification.

**Ectocarpus**, Lyngb.

**E. littoralis**, Lyngb. Very abundant in the Bays, on various submerged substances. Also fringing the steep banks of the thoroughfares between tide marks. Disappearing in July.

**E. siliculosus**, Lyngb. Occurs sparingly on the shores of Little Bay, on *Fucus vesiculosus*.

**E. viridis**, Harv. Common in the Bays, on *Zostera marina*, etc. Disappearing in July.

SERIES 2. **RHODOSPERMEÆ.****Chondria**, Ag.

**C. dasyphylla**, Ag. Plentiful in Little Bay, and on Bond's Bar, growing in large tufts on the sandy mud, to which it is attached by a fibrous root.

**C. Baileyana**, Mont. Common with the above.

**Polysiphonia**, Harv.

**P. Olneyi**, Harv. Rare, on *Zostera marina* in Little Bay.

**P. Harveyi**, Bailey. Very abundant in the Bays, and on Bond's Bar; on *Zostera marina*.

**P. variegata**, Ag. Very common, on *Zostera marina*, also attached to the mud by a fibrous root.

**P. nigrescens**, Grev. I collected fine specimens of this most valuable plant, in fruit, in the month of May. It occurs in great abundance in Little Bay, attached to the bottom by a fibrous root.

**Champia**, Harv.

**C. parvula**, Harv. Plentiful in Little Bay, on *Zostera marina*.

**Grinellia**, Harv.

**G. Americana**, Harv. Of this beautiful plant I found only one perfect specimen. It was growing in the Great Egg Harbor Bay near the shore, attached to the bottom by a somewhat fibrous root.

**Gracilaria**, J. Ag.

**G. multipartita**, J. Ag. Plentiful, particularly fine on planted oysters in Little Bay.

**Solleria**, J. Ag.

**S. chordalis**, J. Ag. Very common on all the shores. There can be no doubt but this bushy plant will grow and flourish in the coves of Little Bay, and other sheltered situations, without a foothold; for I have rarely found it attached to the bottom.

**Chylocladia**, Harv.

**C. Baileyana**, Harv. Frequent, on *Zostera marina*, *Ulva latissima*, etc.

**Spyridida, Harv.**

**S. filamentosa, Harv.** Particularly abundant and vigorous in the Bays; where, sheltered from the winds and waves, like the *Solieria chordalis*, it will luxuriate without the slightest attachment to the bottom.

**Ceramium, Ag.**

**C. rubrum, Ag.** This plant, in all its perplexing varieties, is found on *Zostera marina*, rather abundantly.

**C. diaphanum, Roth.** Occurs sparingly associated with the above.

**C. fastigiatum, Harv.** In dense tufts, on *Zostera marina*, rather rare.

**Callithamnion, Arn.**

**C. byssoideum, Arn.** Frequent on *Zostera marina*, also attached to old shells in Great Egg Harbor Bay.

**C. polyspermum, Ag.** Rare, on old shells in Great Egg Harbor Bay.

**Gelidium, Grev.**

**G. corneum, var.  $\gamma$ . pinnatum, Grev.** I obtained two or three specimens of this plant in Little Bay, on old shells, near low-water mark.

SERIES 3. **CHLOROSPERMEÆ.****Bryopsis, Ag.**

**B. plumosa, Ag.** Not common; attached to old shells and other submerged substances on the shore of Great Egg Harbor Bay.

**Cladophora, Harv.**

**C. falcata, Harv.** Occurs plentiful in Little Bay.

**Enteromorpha, Grev.**

**E. compressa, Grev.** Very common everywhere; infesting the small pebbles on Great Egg Harbor Bay.

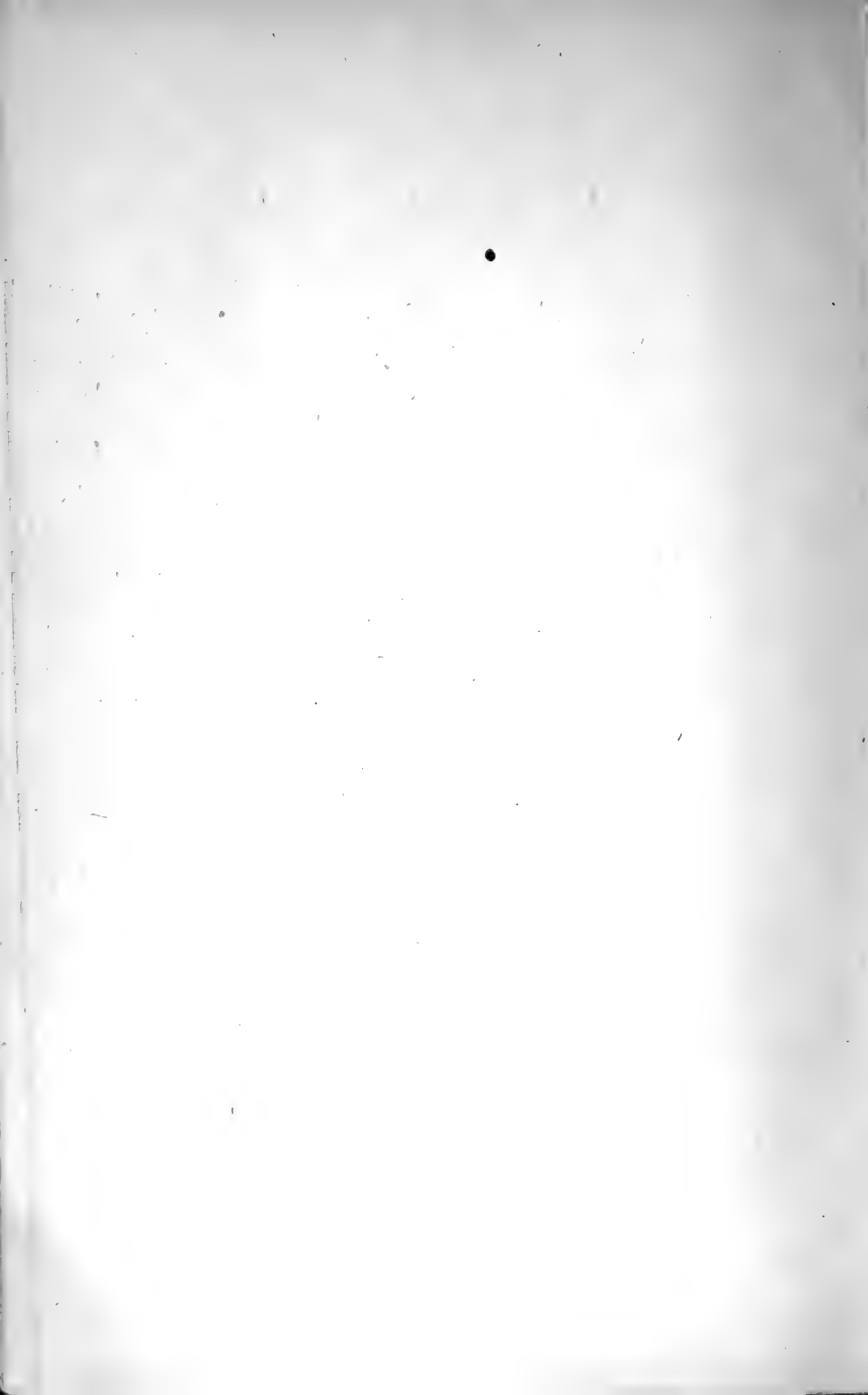
**E. intestinalis, Link.** Abundant in Little Bay, and on Bond's Bar. Frequently found floating in large quantities in the Bays.

**Ulva, L.**

**U. latissima, L.** Common with the above.

**Porphyra, Ag.**

**P. vulgaris, Ag.** Very rare. I have obtained but two or three specimens of this Alga, on *Zostera marina* in Little Bay.













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